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ABSTRACT

Stress factors affecting community college educators in Ontario were determined using a questionnaire survey. The effect of demographic variables (campus location, program types and specialization, gender, age, and years taught at the college) on perceived stress levels were evaluated. Participants rated their present stress levels on a Likert-type scale. Respondents (N=66) rated their current stress level as moderate or quite stressful. Areas causing the most stress were: student literacy/numeracy skills; physical environment such as indoor air quality; student lack of motivation; available supplies and resources; and students with weak mathematics/languages skills. By excluding the Suburban Campus results, indoor air quality (73.7 percent) was the major stressor. In a stress management workshop, several key coping strategies were established such as improving problem solving and communication skills; encouraging teachers to take personal time for hobbies; offering regular workshops on stress management, relaxation, visual imagery, biofeedback, and cognitive restructuring; and encouraging a regular program of fitness and wellness. The key recommendation in this study was to enhance both corporate and personal wellness. Appendices include the survey instrument used to identify stressors among college faculty and figures highlighting study results. Contains 95 references. (Author/GLR)

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STRESS FACTORS AMONG COLLEGE EDUCATORS

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Submitted in partial fulfillment
of the requirements for the degree of

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ABSTRACT

Stress factors affecting community college educators in Ontario were determined using a questionnaire survey. The effect of demographic variables (campus location, program types and specialization, gender, age, and years taught at the college) on perceived stress levels were evaluated. Participants were asked to rate their present stress levels on a Likert-type scale.

Fifty-three percent (66 out of 125) returned the questionnaire and rated their current stress level as moderate or quite stressful. Areas causing the most stress were: student literacy/numeracy skills, indoor air quality, student lack of motivation, available supplies and resources, and students with weak mathematics/languages skills. There were no significant differences between demographic variables and perceived stress levels except for campus locations. By excluding the Suburban Campus results, indoor air quality (73.7%) was the major stressor. In a stress management workshop, several key coping strategies were established such as improve problem solving and communication skills; encourage teachers to take personal time for hobbies; offer regular workshops on stress management, relaxation, visual imagery, biofeedback, and cognitive restructuring; and encourage a regular program of fitness and wellness.

The key recommendation in this study was to enhance both corporate and personal wellness. Corporate wellness comes from building and maintaining a college environment that is conducive to open communication between management, faculty and

students, and the adherence to the mission statement. Personal wellness comes from paying constant attention to physical and mental health, regular exercise, sound nutrition, and a positive mental attitude towards lifelong learning.

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CHAPTER ONE: THE PROBLEM

Introduction

This descriptive study was to examine the perceived stressful factors faced by college faculty on a daily basis (work load, relationship with supervisors, political pressures from management/union, commuting daily to campus, indoor air quality) and many other factors that may contribute to teachers' stress and affect their job performance.

The linkage between teacher stress and teacher performance is well established in scientific literature. The deleterious effects of prolonged work stress among educators and the congelation between stress and deterioration of the instructional ability of teachers in grade schools in both Canada and U.S.A. are readily available in the literature, but research on stress among community college educators, particularly in Canada, is limited.

In reviewing the literature in this area, terms such as stress and burnout are used. There are two models which elucidate the meaning of Stress/Burnout.

The engineering model defines stress as an environmental force/factor external to the individual which acts upon that person in a stressful way (death in the family, divorce, classroom problems, problems with management, etc.).

The biochemical model defines stress as a disturbance of normal biochemical functions as a response to the environmental stressors related to teaching. According to McIntyre (1983), negative affects such as anger or depression are usually accompanied

by potentially pathogenic physiological and biochemical changes (increased heart rate or release of hormones into the bloodstream) which has a profound health effects.

For purposes of clarity and simplicity, the biochemical model will be used in this study to describe stress as an acute phase, and the burnout as the chronic phase of extended emotional exhaustion due to an inability to cope effectively with distress on the job, causing chronic feelings of dissatisfaction with one's self and one's job.

The first method of dealing with stress is to be aware of its existence and to determine realistically some means of reducing its impact or increasing the coping mechanisms. In fact, there is no job that is stress free and stress itself is necessary for survival. Educators need to be aware of stress management and coping skills. Hopefully, this study will initiate several other studies to elucidate in detail the nature of stress factors among community college educators, and detailed coping strategies.

Problem of the Study

The problem in this research project was to determine the extent of stress factors affecting college educators using a survey questionnaire and to the types of coping strategies to deal with stressors using a stress workshop. In addition, the problem was to examine various demographic variables such as campus location whether in metropolitan/suburban, program types, gender, age range, employment status, highest degree earned and years employed by the college which were correlated with stress factors.

Purpose of the Study

The main purpose of this study was to assess stress factors as perceived by college faculty by an instrument which would assist in determining those factors which may contribute to stress in teaching. The purpose of the study was also to investigate possible coping strategies for the specific factors found to be most stressful among college faculty using stress workshops and to examine possible correlation between stress factors and demographic variables. The ultimate goal of this research project was to increase faculty awareness about stressful factors and coping strategies as well as to plan a stress management program for college faculty.

The purpose of the study was also to review current literature related to teachers' stress.

Rationale

Most teachers may not be aware of the long-term implication of stress and burnout. They also may not be aware of the coping strategies and stress management programs available to them. Stress and burnout may affect the best and most dedicated teachers who ignore stress symptoms and continue in the same pattern to compensate for negative feelings.

The lack of Canadian studies in the area of stress among college educators was an important reason for undertaking this research project. If teachers are educated about stress factors and coping strategies, the potential for transforming from illness to wellness will be at their disposal.

Importance of the Study

A brief search in scientific literature via ERIC and similar data bases show that the information about stress among community college educators in Canada, and specifically Ontario, is limited. Identifying stress factors and increasing awareness among college teachers is the first step in stress management and effective coping strategy. The results of this study may provide valuable information which, hopefully, will be put into good use and perhaps initiate a series of studies for stress among other college professionals.

Professional development workshops about stress using the instrument developed in this study or similar instruments may benefit every faculty member even though stress may not be recognized as a major factor in teacher performance. It is my hope that the results and recommendations of this study will be taken seriously.

Definitions of Terms

A Brief definition of stress, burnout, and related terms are provided in this section and will be covered in greater details in Chapter Two.

Burnout and Tedium: States of physical, emotional, and mental exhaustion which are characterized by physical depletion, feelings of helplessness and hopelessness, emotional drain, negative self-concept and negative attitudes towards work, life and other people. They are the sense of distress, discontent and failure in the quest for ideals. It can reach a breaking point beyond which the individual loses the ability to cope with reality and his/her own environment. Although the symptomatologies are similar, burnout is the

result of constant or repeated emotional pressure associated with an intense involvement with people over long periods of time. Tedium is the result of any prolonged chronic pressures (mental, physical or emotional). Tedium results from daily struggles and chronic stress of everyday life.

Coping Strategies: Personal response to stressors to prevent, avoid, and control emotional distress. It is the intentional adaptation to cope with either acute or chronic stress.

Distress: Negative stress - harmful

Eustress: Positive stress - beneficial

Stress: Nonspecific response of the body to any demand made upon it. It is the rate of wear and tear caused by life.

Stress Scale for Life Events: As shown in Table 1. If the total score is above 300 within two years, a person will be under severe distress.

Wellness: Optimal physical, mental and spiritual well being.

Table 1 - Stress Scale for Life Events

EVENT	VALUE	EVENT	VALUE
Death of spouse	100	Son or daughter leaving home	29
Divorce	73	Trouble with in-laws	29
Marital separation	65	Outstanding personal achievement	28
Jail Term	63	Spouse begins or stops work	26
Death of close family member	63	Starting or finishing school	26
Personal injury or illness	53	Change in living conditions	25
Marriage	50	Revision in personal habits	24
Fired from work	47	Trouble with boss	23
Marital reconciliation	45	Change in work hours, conditions	20
Retirement	45	Change in residence	20
Change in family member's health	44	Change in schools	20
Pregnancy	40	Change in recreational habits	19
Sex difficulties	39	Change in church activities	19
Addition to family	39	Change in social activities	18
Business readjustment	39	Mortgage or loan under 10,000 [as of 1967]	17
Change in financial status	38	Change in sleeping habits	16
Death of close friend	37	Change in number of family gatherings	15
Change to different line of work	36	Change in eating habits	15
Change in number of marital arguments	35	Vacations	13
Mortgage or loan over $10,000 [as of 1967]	31	Christmas season	12
Foreclosure of mortgage or loan	30	Minor violation of the law	11
Change in work responsibilities	29		

Adapted from Selye (1981)

Scope and Delimitations of the Study

Stress factors are idiosyncratic in nature. Since this study is certainly local in nature, generalizations and validations for other post secondary institutions in Ontario or across Canada may not be accurate.

Outline of the Remainder of the Document

Chapter Two provides a review of related literature with emphasis of the nature of stress and burnout among educators and review of the possible coping strategies. Chapter Three discusses the research methodology including the pilot study and the research instrument will be outlined. Chapter Four presents detailed survey results and discussion

including major findings. Chapter Five summarizes the results and draws conclusions, considering not only the survey results, but also the coping strategies from the stress workshop.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

An Introduction to the Study of Occupational Stress

Researchers have illustrated the importance of the investigation of stress in the workplace (Levi, 1981; Rogers & Cochrane, 1984). Wallis (1983) stated that, "no one really knows if there is more stress now than in the past, but many experts believe that it has become more pervasive" (p.54).

In the past, many studies of work stress focused on high profile occupations such as physicians, air traffic controllers and dentists (MacBride, 1984) as well as people in executive positions (Caplan, Cobb & French, 1975; Goldberg, 1978). In the interest of progressive research, MacBride (1982a) suggested the empirical studies move beyond the popular exploration of stress in high status jobs. She advocated for an increase in empirical studies of employees in subordinate, frontline work roles.

Pines, Aronson and Kafry (1981) were particularly interested in the issue of stress among direct service workers in the helping profession. They found that the literature and course material dealing with human services pertained almost exclusively to the recipients of the service. They claimed that in regard to the actual service providers "little attention is given to the emotional stresses experienced by professionals" (p.53).

Eaton (1980) identified that workers in the social service field may experience stress which is unhealthy and anxiety producing. He explained that the responsibility of dealing with other people's problems may generate stress in the work environment and within individual workers. A common outcome of prolonged job strain in the helping profession is reduced quality of service (Wallis, 1983).

It was the opinion of MacBride (1983b) that the interests of employees and their job circumstances should be taken into account in the continued exploration of stress across various occupational groups. She made reference to the gap between job stress research and stress management approaches by stating that many of these packages are "ineffective because they are not based on any accurate understanding of the nature and causes of job stress and of the roles and responsibilities of the individual and the organization in responding to stress in the workplace" (p.1).

The examination of occupational stress is extremely important in consideration of the billions of dollars lost in stress-related disability claims, decreased productivity, absenteeism and staff replacement costs particularly when stress claims were awarded by Workers' Compensation Boards in Canada (Finn, 1982).

In a review of stress research approaches, House (1981) confirmed a consensus among investigators that stress is a "phenomenon or process" (p.35). MacBride (1984) explained that the process of stress includes the actual sources of stress (stressor) and the associated stress response. The heightened awareness of the nature and causes of stress was largely responsible for the increased commitment to this topic area (Selye, 1981). Allen, Hitt and Greer (1982) commented on the "mounting interest in what has come to be called job stress" (p.37). A large portion of this interest was generated from the documentation of detrimental stress outcomes. "Occupational stress is in general, dysfunctional for both the individual and the organization and should be minimized" (p.369).

In their concern for employee well-being and health, Parker and DeCotiis (1983) identified the need for more empirical studies of the nature of stress in work organizations. They stated that, "there have been relatively few reports of empirical investigations of stress in work organizations" (p.160).

The literature has plenty of studies related to occupational stress for Elementary and High School teachers, but stress among college and University educators is limited (Larkin & Clagett, 1981) and (Blase, 1986).

The Study of Stress in Work Organizations

It has been widely accepted that work is an integral part of human life (Perlman & Litt, 1982). "In order to function normally man needs work as he needs air, food, sleep, social contact or sex" (Selye, 1981, p.5).

The workplace has assumed a crucial role in the provision of human elements, aside from the obvious physical rewards. Gottlieb (1983) stated that the significant amount of time that people invest in their jobs has led to a "profound impact on their morale, their physical and mental health, and their personal identity" (p.160). Trist (1977) insisted that the humanistic aspects associated with work must be addressed in our efforts to promote desirable outcomes in employment situations. "A new work ethic is beginning to emerge concerned about the workplace as a central part of the quality of life as a whole" (Trist, 1977, p.1).

This trend of thinking was viewed as particularly important in relation to the increasing demands facing people in today's work force. "Clearly the working Canadian

of the 1980s faces a more varied and complex employment scene than ever existed before in history" (Canadian Mental Health Association [C.M.H.A.], 1984, p.1).

In the 1990s, the profession of teaching in Colleges and Universities is becoming more complex, which increasingly compounds stress factors. This was stated in a C.M.H.A. report entitled, Work and Well-Being, which indicated a variety of factors which may affect working people (i.e., economic fluctuations; high unemployment; technological advancements). Dr. Jean Bureau (1983) regarded adaptability to this type of change as "the key to survival"(p.3). Adaptation was also referred to as a means of living a healthy existence (Greenwood 1990).

The focus on wellness and health promotion in the workplace was reflected in employee assistance programs which offered policies, education and training directed toward enrichment in work organizations (Ford, Ford & Weingart, 1985). Mansell (1980) claimed that there are various means of providing work environments with innovative ways of enhancing organization effectiveness. MacBride (1983b) and Mansell (1980) believed in co-operation between management and employees toward the achievement of collective goals. Pike (1985) argued that employment improvement strategies should continue to be developed, expanded and refined in order to meet the changing needs of working people. He also claimed that feedback is essential to the success of people-based, quality of working life approaches. Therefore, he encouraged that "there should be measures to document the impact of diminished stress and/or improved mental health" (p.12). Elucidating and identifying sources of stress and coping

strategies in post secondary organizations should be given much more attention now than in the past (Larkin and Clagett, 1981).

Historical Perspective of Stress and Burnout

"The subject of teacher anxiety has received considerable attention since early in this century" (Cedoline, 1982, p.94). Hicks (1983) found that twenty-eight percent of teachers had significant nervous conditions. The National Education Association conducted studies in 1938, 1951, and 1976 showing an increasing rise in the incidence of moderate to severe stress reported by teachers (as reported in Cedoline, 1983, p. 94).

> The problem of teacher burnout is a matter of deep concern to educational policy makers and administrators because of the vast resources invested in teacher education and in-service training. It is claimed that one out of every four teachers eventually leaves teaching. The low status of teaching, higher salaries on other occupations stress and burnout are possible reasons for this state of affairs. (Kremer and Hofman, 1985, p. 89)

Teachers suffering from burnout were more likely to call in sick, use drugs and alcohol, suffer from insomnia, and have family and marital conflicts.

Maslach and Jackson (1981) developed the Maslach Burnout Inventory (MBI). The MBI is an instrument used to measure perceived burnout in terms of the three subscales of emotional exhaustion, depersonalization, and personal accomplishment. Each of these three also has sub-categories of frequency and intensity.

Maslach's (1982) work dealt with people in the "helping" professions. Here work principally focused on nurses and social workers. She identified three characteristics (aspects) of burnout. A burned-out person feels: 1) Increased feelings of emotional

exhaustion and fatigue. This means that there is a depletion of emotional reserves so the ability to give of oneself is diminished; 2) The development of negative, cynical attitudes towards clients. This means that individuals dehumanize and depersonalize their relationships with clients; and, 3) Negative feelings of self with respect to client relations. Burned-out people are not happy with themselves or their clients. They have a lack of feeling of personal accomplishment (Maslach, 1981). High scores on the MBI scales of depersonalization, combined with a low score on personal accomplishment indicate a "burned out" person. "Burnout is a syndrome, that is '...a set of progressive symptoms' which lead to a diseased state. These systems are organizations and job related" (Maslach, 1982).

The Maslach inventory produces six non-additive subscales on burnout with the relative importance of the frequency and intensity dimensions open to speculation (Stout and Williams, 1983). The Maslach scale may be more useful than the Tedium Measure, another measure of burnout, in investigating patterns as well as stages of burnout, and in situations involving interactions with moderator variables (Stout and Williams, 1983).

Vail (1990) reported that stress levels are greater for primary school teachers, and full-time teachers had greater stress levels than part-time teachers. There was no difference in perceived stress levels as the number of years in teaching increased.

Pines, Aronson, and Kafry (1981) developed the Tedium Measure. "Tedium is defined similarly to burnout: the experience of physical, emotional, and mental exhaustion characterized by the negation of one's self, one's environment, one's work, and one's life. It is considered to be identical to burnout with respect to definition and

symptomology, but the authors reserve the term burnout for people working with people in emotionally demanding situations. Tedium is considered to be a continuous variable but there is only one score" (Stout and Williams, 1983, p. 284). "The Tedium Measure is an economical instrument for measuring burnout and has significant correlations with criterion variables" (Stout and Williams, 1983, p.283). The Tedium Measure scale is used in this research paper to investigate and measure burnout.

Burnout has been regarded by many experts as the final step in a progression of unsuccessful attempts to cope with a variety of negative stress conditions. Studies have shown that people involved in prolonged, constant, intensive interaction with people in an emotionally charged atmosphere are susceptible to burnout (Scaros, 1981).

Definitions of Burnout and Stress

Burnout -- Cherniss (1980) defined burnout as "a process in which a previously committed professional disengages from his or her work in response to stress and strain experienced on the job" (p.18). Pines, Aronson and Kayfry (1981) defining burnout in terms of the "helping professionals" state that "...burnout is the result of constant or repeated emotional pressure associated with an intense involvement with people over long periods of time" (p.15). Gold (1985b) states that "burnout is descriptive of the end product of stress" (p.254). Friesen (1988) indicated that burnout in the "helping" professions is "a loss of idealism, energy, and purpose experienced by people in the helping professions as a result of conditions of their work (p.14). Ruddy (1983) described burnout as "a reaction to stress and becomes a condition which occurs when

the individual becomes saturated with the stressors in life" (p.14). Before burnout can be treated, its causes need to be known and understood (Schwab and Iwanicki, 1982).

Stress -- "Researchers in the area of stress are not speaking a common language" (Saffer, 1984, p.25). In a description of teacher stress and burnout McIntyre (1984) notes that "...stress is seen as a disturbance of normal functioning which is a response to the environmental stressors related to teaching" (p.1). Kyriacou and Suttcliffe (1978b) state that "teacher stress is a response syndrome of negative affects usually accompanied by potentially pathogenic physiological changes resulting from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to his self-esteem or well-being and by coping mechanisms activated to reduce perceived threat" (p.159)

Morocco and McFadden (1980) state that stress in teaching is "...an alteration of psychological homeostasis usually accompanied by psychological changes resulting from aspects of the teacher's job and mediated by the perception that the demands upon the teacher are threats to self-esteem of well-being by psychological coping mechanisms employed to maintain homeostasis" (p.5).

Sources of Teacher Stress - A General Overview

Schwab and Iwaniki (1982) classified teacher stress into three types: societal, organizational, and role related. Societal stress is the most difficult to control as it requires political action by teacher groups. Organizational stress is next, requiring all

teachers to work for changes in organizational structure. Role related stress is the easiest to control though education, understanding, and management.

There are many sources of teacher stress. Kalker (1984) linked cuts in teaching aids, instructional materials and supplies, combined classes, overcrowding, lack of support from school administrators, lack of support of parents, and undisciplined and unmotivated students coming from homes where little emphasis is placed on the importance of education, to stress in teachers. Ruddy (1983) noted that "increased clinical demands" were linked to stress. McIntyre (1984), in a summary of the many sources of burnout among regular educators, cited poor pupil attitudes toward work, trying to uphold and maintain values and standards, covering lessons for absent teachers, involuntary transfer, managing disruptive students, notification of unsatisfactory performance, grasp of knowledge of subject matter, material shortages, resources (curriculums prescribed with no resource materials approved), relations with other faculty, the school system, unsupportive parents, threat of law suit, time demands, increased class enrolments, student violence, paper work, loss of personal time, inadequate preparation time, insufficient opportunities for professional growth, administrator ineffectiveness, and principals' poor handling of discipline as causing stress (p. 7-8). "Poor administrative leadership appeared to be the most significant factor contributing to teacher resignations and overall stress" (p.8).

Society contributes in a financial way to teacher stress and dissatisfaction. "We cannot hope to continue to attract and keep talented teachers without more competitive salaries" (Wangberg, 1984, p.12). Female teachers' salaries can no longer be viewed

as "second incomes." Too many teachers are "moonlighting" in order to survive financially. This should not be necessary and is obviously detrimental to the quality of instruction (Wangberg, 1984). The salary for college teachers is lagging behind elementary and high school teachers in Ontario, and this contentious issue was the key factor for the faculty strike in 1989.

Cedoline (1982) notes that "unsatisfactory evaluation and disagreement with one's supervisor have been cited as significant teacher stressors" (p.99). "Teachers' evaluations tend to focus on two major variables -- personal characteristics and student achievement. Personal variables include such factors as organization, neatness, classroom management, use of materials, enthusiasm, cooperation, participation in school activities, and meeting deadlines. Student achievement is more accountable and is based on standardized tests which do not always reflect the school district and teachers' curricula" (p.100). Evaluation is a stressor known to all teachers. Further, "a conflict exists between teachers taking responsibility for reaching certain levels of achievement, and their lack of authority and control over classroom activities and conditions" (p.101).

Kalker (1984) notes that the poor public opinion of teachers and education is a major sources of teacher stress. All teachers are college graduates, many holding advanced degrees. Yet a poor public image persists and teacher self-esteem is diminished. Salary levels augment these doubts. This trend must be reversed if we value quality education, particularly in the next decade.

Nummela (1982) talks about the process of change being a source of stress. There are four change stages identified: 1) unconscious non-mastery; 2) conscious non-

mastery; 3) conscious mastery; and 4) unconscious mastery. In general, an individual goes from a level where there is no awareness of a need for change. As such, change does not occur and any new skill is not mastered. Stage two is indicated when a person becomes aware of the skills needed, but has no mastery of the skills. Stage three requires a great deal of energy, effort and time. Other activities are sacrificed as the individual struggles to master the new skills. Stage four requires less effort and is characterized by the newly developed skill being used comfortably and appropriately.

> The middle two steps are the most stressful. ...Knowing that we do not know something we need or want to know (unserviced needs such as mainstreaming, drug abuse, sex education, alcohol problems, emotional needs of families under stress, and computerized instruction) (Nummela, 1982, p.80).

and then attempting to learn the new things can have two distinct results -- challenge or defeat.

Change results in stress not only due to the way change takes place, but also because of the rate at which new changes (skills) are required. "The changes in our world are coming so quickly that the need to adapt is continually increasing. Teachers are being asked to respond to and master new situations, new procedures, changed styles, increased dimensions and instructions at such an accelerated rate that our minds and bodies are literally 'burning out' from a constant rate of adaptation" (Nummela, 1982, p.79).

Cherniss (1980) lined the personal significance of work to stress. Teachers' personal identify and self-esteem are tied to the outcomes of their work. "Teachers define their roles in terms of the successes they have with their students. Teachers do

not have control over all the variables which affect student achievement and success. The teacher may not be responsible for the failures of students due to lack of control over external variables but is held to account for students' performances" (p. 50). As has already been shown, a negative work outcome may result in burnout. Cunningham (1983) recommended that teachers need to study stress management, problem-solving skills, and assertiveness to cope physically and emotionally in their career.

Ruddy (1983) noted that client negativism and the resulting negative self-perceptions of helpers increase a sense of vulnerability in the care giver. Maslach (1982) states that "in instances such as these the helper feels helpless -- helpless to control change or cure. The frustration and anger produced by such helplessness may be expressed in either malice or aversion" (p.22). Teachers cannot control every variable in students' lives. Students approach the classroom with home-related, physical and emotional problems which the teacher is not able to alter. Feeling helpless to control entire relationships is problematic for teachers. They cannot control all the variables in students' lives (Ruddy, 1983). Heads of departments in community colleges may also exhibit similar symptoms of anger, helplessness, and burnout, due to high responsibilities and lack of power.

Pines (1981) suggest that helpers tend to be, by nature, more empathetic to the feelings and needs of others than they are to their own feelings and needs. This may become emotionally taxing as the individual neglects his/her own feelings as a result of his/her work with his/her clients. Ruddy (1983) sees the constant responsibility for other people as the most significant factor which contributes to burnout. They stated that "the

single greatest cause of burnout in the helping professions comes from the difficulty in getting away from the problems of clients and patients" (p.231).

"When, in a helping relationship, the problems of the recipient disappears, so do the recipients" (Maslach, 1982, p.19). This is analogous to teaching when one considers that towards the end of the year or semester teachers have established cohesive, well working units of students. They then see these organized and integrated relationships dissolve. "Perhaps just as teachers know and understand their students as individuals, the students must move on" (Ruddy, 1983, p.15). There is stress associated with this loss.

Gold (1985b) notes that "Our schools have changed over these last ten years. Among the more serious problems are poor public opinion regarding education, tight budget constraints, staff reduction, dealing with disruptive behaviour, students' lack of interest in their work, new programs, accountability testing, and excessive paperwork" (p.255).

Wilson (1990) reported that the most stressful events for teachers are those which are imposed upon them and when they have little control, which is usually the responsibility of management.

Leadership Style

Saffer (1984) found that "leadership style has no relationship to levels of personal or organizational stress. However, the leaders who implement a variety of styles of leadership and coping strategies can reduce their own levels of stress" (p.24).

There are many examples in the literatures which link stress and leader behaviours, however. Administrator ineffectiveness, the principal's poor handling of student discipline, administrator rapport, "hassles with administration", lack of recognition and disagreement with principals have been cited as contributing to teacher stress (McIntyre, 1984). "Poor administrative leadership appears to be the most significant factor contributing to teacher resignation" (McIntyre, 1984). Those results can be extrapolated to include higher management in Colleges and Universities (Greenwood, 1990).

Role Conflict

Role conflict may be defined as "the simultaneous occurrence of two or more sets of inconsistent expected role behaviours for an individual" (Schwab and Iwanicki, 1982, p.61). Teaching situations where the desired end results are high student self-esteem and independent, life-long learning contradict the "real" situation of curriculum bound-standardized achievement testing and comprehensive provincial exams which are an example of this. Role conflict "occurs when a person cannot reconcile the inconsistency between these sets of expected role behaviours" (p.61).

Role conflict is related to burnout. The organizational stress variable of role conflict accounted for a statistically significant amount of variance in the emotional exhaustion and depersonalization aspects of teacher burnout (Schwab and Iwanicki, 1982). "Guilt accumulates as teachers admit to themselves that they should be doing more for some students (Cedoline, 1982, p.104).

Teachers expect and desire to teach. Yet, many find a majority of their time is spent maintaining discipline (Kalker, 1984). Pines, Aronson and Kafry (1981) noted that since 1972 classroom murders have increased by 18 percent, rapes by 40 percent, robberies by 37 percent and physical assaults on teachers by 77 percent. Teachers must deal with these situations and the resulting students' reactions to them, while trying to teach a prescribed curriculum. In light of some situations it is surprising that any learning takes place at all. Wangberg (1984) wrote that "teachers must play many roles and to make matters worse, these roles overlap and often are required to occur spontaneously or without prediction" (p.14).

Cedoline (1982) wrote a graphic outline for the cases of role conflict. Societal changes cause much of it. Over half of mothers of school-aged children are working, divorce rates are at an all time high, vandalism and crime are rampant ($600 million is spent annually in the U.S. to repair vandalism damage in schools), the control of parents over their children has been challenged or removed (Young Offenders Act), many families are on the brink of economic disaster, there is alcohol and drug addiction by parents and students, there are nutrition inadequacies, communities change and lack a stable identity, technology is rapidly changing, and curriculums (e.g., computers, sciences, whole language, diagnostic testing, mainstreaming, Human Sexuality, AIDS) and methodologies (e.g., invitational education, learning styles, differentiated and individualized instruction) are changing (p.87). Teachers are forced to cope with these factors with diminished resources, increased demands on their time, lack of support from the public, inadequate training, low funding and tired administrators. Teachers are

unprepared to face current problems due to lack of experience or training (p.91). "The democratic goal of free public education includes meeting the needs of a diverse, heterogenous group of students, each entering at a different intellectual, psychological and social level. Curricula are designed to instruct the majority of the students" (p.103).

Role related distress also occurs when teachers are forced to teach out of their specialty or completely outside of their area of interest merely to maintain a job (Kalker, 1984, and Gold, 1985a).

Locus of Control

Locus of Control, or "the degree to which one feels control over events occurring which affect him or her" (McIntyre, 1982, p.1), is related to burnout. Kyriacou and Sutcliffe (1979) found that teachers with an external locus of control reported significantly more job related stress. The greater the external locus of control, the greater the degree of burnout. McIntyre (1982) found a correlation between locus of control and anxiety. The more external the locus of control, the more anxiety is reported. It was hypothesized that individuals who scored in the external direction of locus of control will tend to be more anxious. Individuals with internal locus of control will feel less anxious because these individuals will more often appraise the world as one in which they can complete organized response sequences.

> One's ability to cope with environmental stress appears to be influenced by one's locus of control. Persons with an internal locus of control (those who feel they have a good deal of control over events affecting their lives), appear to handle environmental stress better than persons with an external orientation (those who believe that much of their

> lives is manipulated by luck, fate, chance, or powerful others). Those teachers with an external orientation report more debilitating anxiety, more neurotic symptoms, and more self punitiveness in response to frustration (McIntyre, 1984, p.21).

McIntyre's (1982) work did not lead to an answer to the question "Does 'burning out' change one's locus of control or does one's original orientation make one more susceptible to burnout?" In 1984, McIntyre found that "...as teachers reported less control over their lives, they also reported a greater degree of burnout." Greenwood (1990) indicated that teachers who exhibited more internal locus of control can motivate students much more effectively than those with external locus of control.

Other Variables and Stress

Many other variables have been related to stress and burnout. Gold (1985a) reported that burnout has been related to work climate, age, education, work experience, job dissatisfaction, job alienation, violence, vandalism, disruptive students, inadequate salaries, teachers believing they have lost control of their classrooms, changing student and community attitudes toward education, collective bargaining issues, repeated layoffs of professional staff, poor relationships within schools, lack of job mobility, and large caseloads.

Role Ambiguity -- Role ambiguity is the "lack of clear consistent information regarding rights, duties, and responsibilities of a person's occupation and how they best can be performed" (Schwab and Iwanicki, 1982, p.62). Role ambiguity is related to burnout. Role ambiguity (along with role conflict) accounted for a significant amount

of variance in the emotional exhaustion and the depersonalization aspects of teacher burnout. Role ambiguity accounted for a statistically significant amount of variance in personal accomplishment. McIntyre reported that "Teachers in organizations with high role conflict and ambiguity levels reported more frequent and intense feelings toward their students" (p.20). These variables also had a minor effect on feelings of professional accomplishment.

Gender -- Males had fewer feelings of personal accomplishment than females and scored higher on depersonalization scales of burnout. This suggests that males burnout more often than females (McIntyre, 1984). Ruddy (1983) found that males had lower emotional exhaustion than females, however.

Age -- McIntyre (1984) found that older special education teachers fared better with the indicators of burnout than younger teachers. "Younger teachers, in comparison with older teachers, inclined to express perceptions indicating both greater amounts of emotional exhaustion and higher degrees of depersonalization" (Gold, 1985b, p.255). When they (younger teachers) find out their expectations cannot be met through teaching, the job becomes a source of stress and frustration. "Possible expertise and job satisfaction come with age. Perhaps most 'burned out' teachers drop out of the profession, leaving a greater percentage of 'burned out' teachers in the younger groupings who will themselves eventually leave the field" (McIntyre, 1984, p.13; Ruddy, 1983).

Level of Education -- McIntyre (1984) found no significant differences in stress due to level of education. This was especially true when a higher degree did not change a

teacher's status in the organization or change his/her job definition. Ruddy (1983), however, found that there was more stress in advanced degree holders.

Race -- Caucasians were found to burn out at higher rates than did blacks (McIntyre, 1984).

Grade Level Taught - Middle school/junior high teachers experience burnout symptoms more than other teachers. High school teachers experience the next greatest amounts stress with elementary teachers experiencing the least. A possible connection to gender may be found here as the majority of elementary teachers are female (Gold, 1985b). Data on College and University educators in Canada, are scattered and scarce (Greenwood, 1990).

McIntyre (1984), in describing studies on needs deficiencies (security, sociability, esteem autonomy and self-actualization), reports that teachers who were experiencing more intensity and frequency of burnout also exhibited greater deficiencies in the areas of self-actualization and esteem. Self-actualization and esteem (social) needs were satisfied more in elementary and high school teachers than in middle school/junior high teachers (p.23).

Marital Status -- Singles, divorced or widowed teachers report more emotional exhaustion and more intense feelings of depersonalization than married peers (McIntyre, 1984; Ruddy, 1983).

Years of Experience -- There is some suggestion that increased years of experience correlates to lower feelings of personal pride on the job, and decreases in negative feelings toward students and emotional exhaustion (Ruddy, 1983). "The security needs

of teachers having taught less than five years were met to a lesser degree than teachers who have taught more than five years" (McIntyre, 1984, p.23).

Professional Identity -- Hofman and Kremer (1981), focusing on role-related stress, found professional identity to be a statistically significant predictor of job-leaving inclination. High levels of burnout are associated with weak professional identity (Kremer and Hofman, 1985).

Size of Community -- Community size does not have an effect on burnout (McIntyre, 1984).

The Nature of Stress and Burnout

"Job burnout and job dissatisfaction are not synonymous constructs" (McIntyre, 1984, p.23). Teachers expect and desire to teach (Kalker, 1984), yet the body's ability to adapt to stress, called "adaptation energy", is finite. Exposure to constant stressors can only be tolerated so long. Rest and relaxation can restore resistance and adaptation levels in the individual to a certain point, but if the stress continues, ultimate exhaustion will occur. Exposure to stress works in a counterproductive way, setting the stage for future pathology (Selye, 1956).

Selye (1956) explained stress biologically as an arousal of the "General Adaptation Syndrome" (GAS). The GAS response consists of a three-phase process. The first phase is known as the "alarm reaction." This is when stress is generalized and is quite apparent because the activity of most body systems is elevated. The second phase is the "resistance phase." The body will appear to be adapting to the stressor in that the stress

arousal seems to be localized in one or two body systems with few or no apparent symptoms.

The "exhaustion phase" is where the system seems to be saturated and may break down sending the body back to a more apparent generalized stress reaction. Exhaustion can result in disease or death (Kutash, Schlessinger and Associates, 1980, p.133).

Friesen (1988) described being burned out at "a feeling of exhaustion and fatigue, being unable to shake a lingering cold, suffering from frequent headaches and gastrointestinal disturbances, sleeplessness, and shortness of breath. In short, one becomes too somatically involved with one's bodily functions" (p.160). It is a result of working "too much, too long and too intensely. Those that burn out often have a need to give that is excessive and, in time, unrealistic" (pp.161-162).

Burnout occurs when people "lose all concern, all emotional feeling for the persons they work with and come to treat them in detached or even dehumanizing ways" (Maslach, 1976, p.16). Burnout occurs "when the professional is forced to provide care for too many people" (p.18). "Mental exhaustion is best characterized by the development of a negative self-concept and a decrease in self-esteem. There is a self-preoccupation and increased negative self-talk" (Kalker, 1984, p.17).

A burnt-out person is "...someone in a state of fatigue or frustration brought about by devotion to a cause, way of life or a relationship that failed to produce the expected reward. Stated another way, whenever the expectation level is dramatically opposed to reality and the person persists in trying to reach that expectation, trouble is on the way" (Friesen, 1988).

"Burnout seems uniquely applicable to those individuals who spend considerable amounts of energy in order to understand and guide others in gaining insight and overcoming problems" (Whiteman, 1985). In 1981, Pines cited three reasons why helping professionals, such as teachers, tend to burn out more frequently than other professionals. First, they perform emotionally taxing work; second, they share certain personality characteristics that make them choose human service as a career; and third, they share a 'client-centred' orientation (p.48). Helping professions, such as teaching, appear to attract people who: set high standards for themselves and others; are typically punctual, hurried, and easily bored; have external locus of control; are flexible; and tend to withdraw from others when they are experiencing stress. These qualities tend to contribute to burnout in the individual. Whiteman (1985) identified five personality traits which are common to people who tend to burn out: neurotic anxiety, the 'Type A' syndrome, external locus of control, flexibility and introversion. "The intensity, duration and frequency of symptoms and consequences vary from individual to individual" (Kalker, 1984, p.17).

The Effects of Stress on Teachers and Teaching

"Although much has been written about burnout in education, research on teacher burnout is limited. Most of the systematic research on burnout as focused on the helping professions in general, with teachers representing only a small part of such investigations:" (Schwab and Iwanicki, 1982, p.60). However, Gold (1985) reported

that "more than 11% of teachers were burned out according to conservative guidelines" (p.406).

"The impact of stress and burnout on the quality of education today is serious" (Gold, 1985b, p.254). A teacher experiencing severe stress and burnout represents a great expense to all involved. A career change results in a waste of many years of training, as well as the investment of time and money. A career change also can result in a sense of failure and guilt in the individual (Kalker, 1984, p.17). In a study (Wangberg, 1982), asking female teachers from across the United Stated if they would again choose teaching as a career, forty percent said no. These teachers cited poor working conditions and the availability of increased career options for women.

Whiteman et al.. (1985) found that "questions as to the consequences of impaired teaching or even harmful effects on their students' self-concept have been raised" (p.299). "The character or personality of the teacher is more important for student success than instructional techniques" (p.300). Burnout not only presents a real danger to teacher's mental and physical health, but may negatively impact on his/her attitude toward students. The teacher's interpretation of student behaviours appears to become more negative as burnout becomes more severe. "Should this be the case, the degeneration of classroom behaviour seems inevitable" (p.304). "The consequence of burnout is teacher ineffectiveness" (p.300).

"Teaching is perceived as being a stressful occupation by a large number of its practitioners" (McIntyre, 1984, p.4). McIntyre (1984) reports that "three-quarters of urban teachers left the profession due to self-perceived intolerable stress. They indicated

emotional and physical exhaustion, and felt a sense of low personal accomplishment" (p.4). The turnover rate of teachers during the 1980s doubled over the early sixties estimate of seven to ten percent annually. In 1962, twenty-eight percent of all teachers had twenty years of experience, but in 1976 that number had been reduced to fourteen percent. These figures reflect a refusal of many teachers to continue to work in a stressful occupational environment. "Remaining on the job and 'surviving' from year to year results in an unproductive, ungratified life for the teacher. The ultimate sufferers, however, become the students who don't have a teacher dedicated toward giving their education a good, honest effort" (Kalker, 1984, p.17). "A burned out teacher remaining on the job goes through a constant day-to-day struggle just to get by. This results in a lack of opportunity for the student" (p.19).

Finally, "as a result of perceptions of low status and rewards and of increased career options for women, we are hearing disturbing reports on the quality of prospective teachers. Teaching is not only failing to attract the most capable students, but is attracting a disproportionate share of the least capable" (Wangberg, 1982, p.12).

Coping/Remediation

Martinez (1989) offered practical suggestions for coping with teacher stress. He advised that teachers develop a personal repertoire of coping strategies, which may take time and experience. Some guidelines include: balancing high and low stress activities to allow for recovery time, learning to relax during rest times, as well as developing a turn-off switch for problems during times of stress. It is possible to change distress to

eustress through attitude, focusing not on the problems, but on the solutions. Other critical strategies are to avoid overeating, overdrinking, overspending, overspeeding, and overtaking drugs. This article is a must reading for every college faculty member.

"The general public is not likely to rally for smaller classes, higher wages and better working conditions in behalf of teachers" (Whiteman et al., 1985, p.303). Teachers must face stress alone. Ruddy (1983) found that most teachers were unable to do this, however. "A large number of respondents (85.9% of males) indicated that they could not or did not have effective means of coping with job related stress" (p.123). This finding suggests an important and significant need for positive methods of coping with job related stress and burnout to be developed and taught to those teachers experiencing burnout, or who may experience this syndrome in the future.

Remer (1984), in a workshop outline on coping with and reducing stress, suggests that attention to "lifestyle, planning, nutrition, exercise (walking, running, dance, karate, aerobics), networking, social support systems, relaxation (includes relaxation, hypnosis, prayer, mediation, yoga, stress inoculation, biofeedback, and self-talk), and communication skills" (pp.1-2) may increase an individual's capacity to cope with or reduce stress. Wangberg (1982, 1984) states "we must take in order to be able to continue to give. Such 'taking' may be in the form of physical exercise, time outs, special hobbies or events to look forward to, mental health days, nutritional diets, vitamin supplements, long baths or showers, relaxation exercises, vacations, sabbaticals or leaves, or simply learning to say 'no' to extra duties, committees or responsibilities" (Wangberg, 1982, p.14). The author also suggested physical exercise, relaxation

periods, temporary withdrawal from direct client/student interaction, work breaks, and changes in routine as remediation/strategies for stress. "A teacher's level of physical fitness upon entering a training program was the single most frequent predictor of the degree to which he or she would subsequently use his or her new skills in the classroom" (McLaughlin, 1984, p.51). The author also suggested that teachers should "have creative hobbies, do reflective reading, meet exciting people, take walks, and to generally relax" (p.7).

Other resources which currently are available, but are unused may be utilized in dealing with teacher stress. "Among the implications for interventions is a more thorough utilization of existing resources. School psychologists and counsellors may expand their services to include the needs of teachers" (Whiteman et al., 1985, p.304).

Gold (1985b) identified another possible intervention route: student/teacher education and stress inoculation. "There is little evidence...that anything is being done to prepare student teachers to cope with the stress that is part of the teaching situation" (p.256). Teacher training does a poor job of adequately preparing students for stress. Nearly 70% of teachers reported that they either never, or rarely felt as if they were adequately prepared. "Too often the professional is either undertrained for his/her job or has been taught a false concept of how it is in the real world of teaching, which has led him/her into disillusionment" (p.256).

Kalker (1984) reported that "teachers may climb the administrative ladder as a way of escaping a job in which they have burned out. Many end up as burned-out administrators, providing little or no support for the new teachers who have taken their

place...the situation worsens" (p.18). "Burnout may be contagious" and "burned out administrators may have a significant negative effect on their staff and students" (Ruddy, 1983, p.117). The rotation of administrators out of the position has been suggested as a way of revitalizing the position of leader (p.118).

Several researchers have indicated that locus of control can be changed. That being the case, interventions designed to change the locus of control of external, burned-out teachers is in order (McIntyre, 1982).

Assessment and identification of victims of stress and burnout is a logical first step in any intervention or remediation strategy. Caution must be used that these first steps are used only for the specific purpose of identifying or assessing stress. "Any use of assessment procedures to attack the teaching profession, and teachers in particular, for political gain or chastisement, would defeat such a movement" (Whiteman et al., 1985, p.304).

The Role of Administration in Reducing Teacher Stress

"Poor administrative leadership appears to be the most significant factor contributing to teacher resignations" (McIntyre, 1984, p.8). "There is a significant correlation between increased emotional exhaustion and depersonalization dimensions of stress and the amount of principal support. Less principal support resulted in greater teacher burnout" (Connolly and Saunders, 1988, p.8).

"The administrative structure is the salient force in the establishment and maintenance of a positive emotional climate" (Whiteman et al., 1985, p.301).

"Management must accept responsibility for the role they have in the remediation of teacher burnout" (Gold, 1985a, p.212). "A supportive administration, and particularly direct support from the chairperson, has surfaced as an important factor in stress reduction in the workplace. The element of 'buffer' has been identified as the needed administrative support" (Connolly and Saunders, 1988, p.11).

Teacher burnout occurs when all of a teacher's six personal support systems fail. Administrators usually have little influence over three of these support systems (friends, family, and community), but can influence in either a negative or positive way the other three -- namely self, profession, and job. By enhancing these latter three support systems via wisely structured in-service education, administrators can decrease teacher stress and provide a more supportive environment for effective teaching (Wilson, 1990).

"Training for administrators in at least the following areas is crucial for protection against burnout: renewed management and leadership skills, self-awareness, facilitation of group processes, public relations, decision making, stress management training, instructional skills, employee motivation and evaluation, legal updates, negotiation and collective bargaining and time management" (Cedoline, 1982, p.91). "More importantly, time and some form of assistance must be provided to make the process effective and meaningful" (p.91).

"By showing caring and concern for the well being of teachers, management can help to eliminate much of the job related stress in teaching" (Ruddy, 1983, p.132). To assist staff in overcoming stress associated with student discipline, supervisors need to provide opportunities to learn from mistakes, suggest new-discipline alternatives, and

structure situations so that teachers feel they can be in control of their classes, curricula, and behaviour management programs (Dworkin, 1990). "Supervisors should start by surrounding their faculty with good periodicals and tapes... . This should be followed by discussion on learning styles, and left and right brain thinking, for example:" (McBride, 1984, p.14).

"Teachers are placing some responsibility for their help in management's hands because they can influence so many of the causes of staff health troubles. Management can offer more positive reinforcement; help with curriculum decisions, especially controversial ones; act as buffers; and aid teachers in improving college/community relationships. They can help to reduce class size, foster more open communications among staff members, and help teachers to cope effectively with stress" (Landsman, 1978, pp.48-50).

In an article outlining what management can do for teachers to help in coping with a relieving stress Freissen (1988) listed the following steps administrators could take:

1. Eliminate any unnecessary stress.
2. Improve communication channels.
3. Encourage teachers to take personal time for hobbies and activities.
4. Offer or organize workshops on stress management, relaxation, visual imagery, biofeedback, and cognitive restructuring.
5. Encourage a regular program of faculty fitness and exercise to enable teachers to vent stress in an appropriate way.

6. Communicate clearly the performance goals for the organization, themselves and teachers.
7. Encourage interaction with peers (team building).
8. Help teachers to plan ahead, offer new ideas, techniques, and to rotate out of exhausting jobs.
9. Encourage staff members to express their ideas.
10. Involve staff in decisions that are relevant to them.
11. Encourage staff members to develop support systems.
12. Discuss with teachers the appropriate use of worry.
13. Assist teachers in lowering unrealistic expectations.
14. Manage stress through the use of humour. (p.75-76)

Summary

This review has cited several studies relating directly to the stress factors affecting educators and several coping strategies to alleviate the acute and chronic effect of stress on educators. It can be shown that studies on stress factors for college and university educators are few and scattered.

CHAPTER THREE: METHODOLOGY AND PROCEDURES

Overview

In this chapter, the methods used to establish and describe the factors associated with stress among community college faculty and the coping strategies in a stress workshop are outlined.

Re-Statement of the Problem

The problem in this descriptive study was to investigate the perceived stress factors affecting community college educators using a survey questionnaire and the types of coping strategies used to deal with stressors using a stress workshop.

The purpose of the study was to survey stress factors among college faculty and to examine which factors contribute most to stress among educators using an instrument to measure perceived stress levels.

The goal of this research project was to increase faculty awareness about stressful factors and coping strategies and to plan an effective stress management program for faculty as a part of professional development program.

Research Design

This study was primarily descriptive in nature. Two approaches were used, first a qualitative survey instrument adapted from Vail (1990) which was modified to include fifty questions, nine demographic, and the other forty-one questions determined the

stressful factors perceived by community college educators. As a second step, a workshop was designed from the outcome of the descriptive survey to deal with possible coping strategies. While certain inference and assumption may be made about the sample in the study, no serious attempt was made to examine causality.

Pilot Study

A pilot study was conducted to examine the relevance of the proposed instrument (Appendix A).

No changes were suggested from 20 faculty participants and every participant recommended using the instrument as it was developed after minor changes. Some participants suggested limiting the survey to the main Metro Campus, while others suggested extending the survey to every campus location. It was decided to leave the selection to five campus locations including the main campus, three campus locations in Metro Toronto, and one suburban campus. Due to the heterogeneity of stress factors between this campus and the other Metro Campus locations results were analyzed using all campus locations as well as by excluding the suburban campus locations.

Population and Sample

A random sample of 125 Community College Teachers at different Campus locations and various specializations were chosen from the faculty directory and surveyed representing approximately 18% of the total full-time faculty population. Participants were asked to voluntarily and anonymously complete and mail the questionnaire within

five days. The survey (Appendix B) consisted of several demographic variables and other questions as follows:

Q1 Campus Location

Q2 Program Types

Q3 Area of Specialization

Q4 Gender

Q5 Age Range

Q6 Employment Status

Q7 Highest Degree Earned

Q8 Years Employed at the College

Q9 Job Before Joining the College

Q10 Supervisor Relationships

Q11 Intra-campus Politics

Q12 Marking Load

Q13 Time Management

Q14 Commuting To and From Campus

Q15 Noise in the Classrooms/Laboratories

Q16 Indoor Air Quality

Q17 Student Listening Skills

Q18 Meetings During Semester

Q19 Students Entering/Leaving Class

Q20 Available Supplies/Resources

Q21 Staff Relationships

Q22 Lack of Professional Development Opportunities

Q23 Student Literacy/Numeracy Skills

Q24 Curriculum Covered During a Semester

Q25 Multicultural Issues

Q26 Large class Size

Q27 Paperwork Required

Q28 Time Table Co-ordination

Q29 Disruptive Students

Q30 Student's Part-time Work

Q31 Time for Special Needs Preparation

Q32 Self-evaluation Program

Q33 Planning time for Lectures/Labs

Q34 Rude Student Behaviour

Q35 Departmental Paper Waste

Q36 Students' Immaturity

Q37 Students' Weak Mathematic/Language Skills

Q38 Unclear Student Career Goals

Q39 Low Faculty Self-esteem

Q40 Low Student Self-esteem

Q41 Performance on Assignments

Q42 Faculty Lack of Motivation

Q43 Student Lack of Motivation

Q44 Faculty Job Security

Q45 Faculty Chemical Dependency

Q46 Student Chemical Dependency

Q47 Faculty Health/Lifestyle Issues

Q48 Student Health/Lifestyle Issues

Q49 Faculty Personal/External Problems

Q50 Student Personal/External Problems

Subjects were asked to rate each statement on a likert-type scale of one to five, with 1 least stressful, 2 slightly stressful, 3 moderately stressful, 4 quite stressful, and 5 very stressful. Surveys were returned via intercampus mail and kept in a locked filing cabinet until the study was completed.

Instrumentation

The study instrument (Appendix B) is a novel questionnaire which was developed by means of consultation with faculty members about the most stressful factors that they perceived in their teaching career at a Metro Community College and by means of the pilot study.

As shown in the survey, there were nine questions asked to establish the demographic profile of teachers:

Q1 **Campus Location** (Urban, Suburban)

Q2 **Program Types** (Applied Arts, Business, Health/Bio Science., Technology and Computer Science, and English)

Q3 **Specialization** (Early Childhood Education, Business Administration, Nursing, Bio Science, Engineering Technology, Computer Science, and English)

Q4 **Gender** (Male, Female)

Q5 **Age Range** (24 - 29, 30 - 34, 35 - 39, 40 - 49, 50 and over)

Q6 **Employment Status** (Full-time, Part-time, and Seasonal)

Q7 **Highest Degree Earned** (Diploma, Bachelors, Masters, Doctorate)

Q8 **Years Employed at the College** (0 - 5, 6 - 10, 11 - 15, 16 - 20, Over 20)

Q9 **Job Before Teaching at the College** (Straight from University/College, Teaching at University/College, Working in the industry)

In addition to the demographic variables, subjects were asked to respond to 41 questions which reflect potentially stressful situations associated with College Teaching as follows:

Q10 Relationship with Supervisor

Q11 Intra-Campus Politics

Q12 Marketing Load

Q13 Time Management

Q14 Commuting Daily to Campus

Q15 Noise in Classroom/Laboratory

Q16 Indoor Air Quality

Q17 Student Listening Skills

Q18 Meeting During Semester

Q19 Student Entering/Leaving Class

Q20 Available Supplies/Resources

Q21 Staff Relationships

Q22 Lack of Professional Development Opportunities

Q23 Student Literacy/Numeracy Skills

Q24 Curriculum Covered During a Semester

Q25 Multicultural Issues

Q26 Large Class Size

Q27 Paperwork Required

Q28 Time Table Co-ordination

Q29 Disruptive Students

Q30 Students' Part-time Work

Q31 Time for Special Needs Preparations

Q32 Self-Evaluation Program

Q33 Planning Time - Lectures/Labs

Q34 Rude Student Behaviour

Q35 Departmental Paper Waste

Q36 Student Immaturity

Q37 Students with Weak Mathematics/Language

Q38 Unclear Student Career Goals

Q39 Low Faculty Self-Esteem

Q40 Low Student Self-Esteem

Q41 Performance on Assignments

Q42 Faculty Lack of Motivation

Q43 Student Lack of Motivation

Q44 Faculty Job Security

Q45 Faculty Chemical Dependency

Q46 Student Chemical Dependency

Q47 Faculty Health/Lifestyle Issues

Q48 Student Health/Lifestyle Issues

Q49 Faculty Personal/External Problems

Q50 Student Personal/External Problems

Subjects were asked to rate each statement on a likert-type scale of 1 to 5, with 1 as least stressful, 2 slightly stressful, 3 moderately stressful, 4 quite stressful, and 5 very stressful.

They were asked to anonymously return the completed survey within five days to the investigator.

Approval Procedure

The approval to proceed with this study was granted from the Brock University Subcommittee on Research of Human Subjects, and the approval to conduct the survey at this college was approved by the College Management. Letters of approval are included in Appendix C.

Data Collection, Processing and Analysis

Most of the survey results were returned within seven days. Out of 125 questionnaires, 66 (52.8%) were received. All replies were received anonymously and kept in a locked cabinet as per research protocol. Frequency counts and percentage were completed for every survey using d-Base III, and the results were analyzed statistically using the SPSS-X package.

All questions were ranked using the following scale:

0 - 19 %	Least Stressful
20 - 39 %	Slightly Stressful
40 - 59 %	Moderately Stressful
60 - 79 %	Quite Stressful
80 - 100 %	Very Stressful

Since the study was intended to be descriptive in nature, the answers to the questions were ranked from the highest stress to the lowest stress, to identify those factors that contributed most in teacher stress. The questionnaire provided an opportunity for participants to express their feelings about the factors and the extent of classroom stressors. The study was an attempt to seek answers by identifying the most

common stressors among college educators, and conducting a workshop to find possible coping strategies and solutions to the problems found.

Methodological Assumptions

It was assumed that stress factors can be assessed by the questionnaire and can be statistically analyzed.

It was also assumed that respondents were able to evaluate the degree by which each stress factor influenced their job performance and to recognize the difference between environmental stressors and classroom stressors.

The assumption that each faculty member participating in this survey answered all questions honestly is critical in the integrity of the research results.

It was finally assumed that every teacher was able to distinguish between mental, physical, and emotional types of stresses.

Limitation of the Study

The results of the study were limited to the accuracy of information received from every college teacher and it depends on sample size. The larger the sample size, the more accurate the statistical analysis of the results. Also, the perceived level of stress may vary widely among teachers. During the course of the survey at the Main Campus, the smell of fresh paint may have influenced the opinion of teachers about indoor air quality, which was found to be stressful. Also, during the same period, September 18, 1991, the change from air conditioning to the heat cycle may have contributed to

heat/cold distress for some faculty, which might have influenced their opinion about indoor air quality. The results from other campus locations may have been influenced by similar factors which may limit the reliability of data obtained.

CHAPTER FOUR: FINDINGS (ANALYSIS AND EVALUATION)

Overview

A demographic profile of the study participants will be presented in tables and figures format. Major findings from statistical analysis will be given and tabulated. The chapter will conclude with a discussion of the results and coping strategies from the stress workshop.

Demographic Profile

The results of the demographic profile are summarized in Table 1.

As shown in the tables, the majority of the participants (63.6%) came from the Main Campus. Program types and specialization were evenly distributed across the college. Female respondents (59%) were slightly higher than male respondents (41%). The majority of respondents (60%) were over the age of 40, and most of them (86.4%) held full-time positions. Half of the participants (50%) completed a Masters Degree, and 40% had either a Bachelors Degree or lower, and only 10.6% had their Doctorate Degree.

Those faculty who were employed at the College for less than five years represented 30%, 6-10 years - 24%, 11-15 years - 9%, 16-20 years - 27 %, and over 20 years - 9%.

Half the participants came to college teaching after a career in the industry, where the other half came either from other teaching careers in a University/College or straight after completing their University/College education.

Table 2 - Demographic Profile of College Faculty (Questions 1-9)

Q1	CAMPUS LOCATION		
Value Label	Value	Frequency	Percent
1. MAIN CAMPUS	A	42	63.6
2. SUBURBAN CAMPUS	B	9	13.6
3. CAMPUS	C	7	10.6
4. CAMPUS	D	4	6.1
5. CAMPUS	E	4	6.1
	Total	66	100.0

Q2	PROGRAM TYPES		
Value Label	Value	Frequency	Percent
APPLIED ARTS	A	20	30.2
BUSINESS	B	10	15.2
HEALTH SCIENCES	C	9	13.6
TECH. AND COMP SC.	D	21	31.8
ENGLISH	E	6	9.1
	Total	66	100.0

Q3	SPECIALIZATION TYPES		
Value Label	Value	Frequency	Percent
EARLY CHILDHOOD ED.	A	9	13.6
BUS. ADMINISTRATION	B	18	27.3
NURSING/BIOSCIENCE	C	13	19.7
ENG. TECH/COMP. SCI.	D	18	27.3
ENGLISH	E	8	12.1
	Total	66	100.0

Q4	GENDER		
Value Label	Value	Frequency	Percent
FEMALE	A	39	59.1
MALE	B	27	40.9
	Total	66	100.0

Q5	AGE RANGE		
Value Label	Value	Frequency	Percent
24 - 29	A	7	10.6
30 - 34	B	5	7.6
35 - 39	C	14	21.2
40 - 49	D	19	28.8
50 AND OVER	E	21	31.8
	Total	66	100.0

Q6	EMPLOYMENT STATUS		
Value Label	Value	Frequency	Percent
FULL-TIME (DAY)	A	57	86.4
PART-TIME	B	5	7.6
SESSIONAL/PART LOAD	C	4	6.1
	Total	66	100.0

Q7	HIGHEST DEGREE EARNED		
Value Label	Value	Frequency	Percent
BACHELOR'S DEGREE	A	20	30.3
MASTER'S DEGREE	B	33	50.0
DOCTORATE	C	7	10.6
DIPLOMA-TECHNOLOGY	D	6	9.1
	Total	66	100.0

Q8	YEARS EMPLOYED AT THE COLLEGE		
Value Label	Value	Frequency	Percent
0 - 5 YEARS	A	20	30.3
6 - 10 YEARS	B	16	24.2
11 - 15 YEARS	C	6	9.1
16 - 20 YEARS	D	18	27.3
OVER 20 YEARS	E	6	9.1
	Total	66	100.0

Q9	JOB BEFORE TEACHING AT THE COLLEGE		
Value Label	Value	Frequency	Percent
UNIV/COLL - STRAIGHT	A	16	24.2
TAUGHT - UNIV/COLL	B	17	25.8
IN RELATED INDUSTRY	C	33	50.0
	Total	66	100.0

Major Findings: Perceived Stressful Factors Among College Educators

In order to rank stressful factors from the highest to the lowest, all results were tabulated using the following scale:

Frequency (%)

0 - 19 %	Least Stressful
20 - 39 %	Slightly Stressful
40 - 59 %	Moderately Stressful
60 - 79 %	Quite Stressful
80 - 100 %	Very Stressful

Stress levels from moderate (40%) to very stressful (100%) were tabulated for every question and then the factors were ranked from the highest to the lowest using the data from five campus locations and by excluding the suburban campus location.

The overall perceived stress levels, considering all campus locations, ranged from 69.7% to 65.1%, from the most to the fifth stressful factors respectively, as shown in Table (3), Table (4), and Figures 1-10 (Appendix D).

By excluding the suburban campus, stress levels varied from 73.7% to 66.6%, from the most, to the fifth stress factor respectively, as outlined in Table (5) and Figures 11-15 (Appendix D).

Table 3 - Frequency Distribution of Stressful Factors (Questions 10-50)

Q10	SUPERVISOR RELATIONSHIP		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	23	34.8
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	15	22.7
QUITE STRESSED	D	6	9.1
VERY STRESSED	E	4	6.1
	Total	66	100.0

Q11	INTRA-CAMPUS POLITICS		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	11	16.7
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	17	25.8
QUITE STRESSED	D	14	21.2
VERY STRESSED	E	6	9.1
	Total	66	100.0

Q12	MARKING LOAD		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	5	8.8
SLIGHTLY STRESSED	B	20	29.8
MODERATE STRESS	C	25	35.1
QUITE STRESSED	D	9	14
VERY STRESSED	E	7	12.3
	Total	66	100.0

Q13	TIME MANAGEMENT		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	14	21.2
SLIGHTLY STRESSED	B	19	28.8
MODERATE STRESS	C	20	30.3
QUITE STRESSED	D	12	18.2
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q14	COMMUTING		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	25	37.9
SLIGHTLY STRESSED	B	15	22.7
MODERATE STRESS	C	14	21.2
QUITE STRESSED	D	8	12.1
VERY STRESSED	E	4	6.1
	Total	66	100.0

Q15	NOISE IN CLASSROOM/LAB		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	13	19.7
SLIGHTLY STRESSED	B	25	37.9
MODERATE STRESS	C	18	27.3
QUITE STRESSED	D	8	12.1
VERY STRESSED	E	2	3.0
	Total	66	100.0

Q16	INDOOR AIR QUALITY		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	8	12.1
SLIGHTLY STRESSED	B	13	19.7
MODERATE STRESS	C	11	16.7
QUITE STRESSED	D	20	30.3
VERY STRESSED	E	14	21.2
	Total	66	100.0

Q17	STUDENT LISTENING SKILLS		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	6	9.1
SLIGHTLY STRESSED	B	25	37.9
MODERATE STRESS	C	22	33.3
QUITE STRESSED	D	10	15.2
VERY STRESSED	E	3	4.5
	Total	66	100.0

Q18 MEETINGS DURING SEMESTER			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	19	28.8
SLIGHTLY STRESSED	B	27	40.9
MODERATE STRESS	C	13	19.7
QUITE STRESSED	D	5	7.6
VERY STRESSED	E	2	3.0
	Total	66	100.0

Q19 STUDENTS ENTERING/LEAVING CLASS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	15	22.7
SLIGHTLY STRESSED	B	30	45.5
MODERATE STRESS	C	15	22.7
QUITE STRESSED	D	5	7.6
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q20 AVAILABLE SUPPLIES, RESOURCES			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	7	10.6
SLIGHTLY STRESSED	B	15	22.7
MODERATE STRESS	C	15	22.7
QUITE STRESSED	D	12	18.2
VERY STRESSED	E	17	25.8
	Total	66	100.0

Q21 STAFF RELATIONSHIPS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	22	33.3
SLIGHTLY STRESSED	B	23	34.8
MODERATE STRESS	C	13	19.7
QUITE STRESSED	D	4	6.1
VERY STRESSED	E	4	6.1
	Total	66	100.0

Q22 LACK OF PROF. DEVELOPMENT OPPORTUNITIES			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	31	47.0
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	11	16.7
QUITE STRESSED	D	6	9.1
	Total	66	100.0

Q23 STUDENT LITERACY/NUMERACY			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	1	1.5
SLIGHTLY STRESSED	B	19	28.8
MODERATE STRESS	C	20	30.3
QUITE STRESSED	D	19	28.8
VERY STRESSED	E	7	10.6
	Total	66	100.0

Q24 CURRICULUM COVERED DURING A SEMESTER			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	9	13.6
SLIGHTLY STRESSED	B	24	36.4
MODERATE STRESS	C	21	31.8
QUITE STRESSED	D	12	18.2
	Total	66	100.0

Q25 MULTICULTURAL ISSUES			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	12	18.2
SLIGHTLY STRESSED	B	24	36.4
MODERATE STRESS	C	22	33.3
QUITE STRESSED	D	7	10.6
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q26	LARGE CLASS SIZES		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	7	10.6
SLIGHTLY STRESSED	B	19	28.8
MODERATE STRESS	C	16	24.2
QUITE STRESSED	D	15	22.7
VERY STRESSED	E	9	13.6
	Total	66	100.0

Q27	PAPERWORK REQUIRED		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	7	10.6
SLIGHTLY STRESSED	B	25	37.9
MODERATE STRESS	C	19	28.8
QUITE STRESSED	D	10	15.2
VERY STRESSED	E	5	7.6
	Total	66	100.0

Q28	TIME-TABLE CO-ORDINATION		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	19	28.8
SLIGHTLY STRESSED	B	17	25.8
MODERATE STRESS	C	14	21.2
QUITE STRESSED	D	10	15.2
VERY STRESSED	E	6	9.1
	Total	66	100.0

Q29	DISRUPTIVE STUDENTS		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	18	27.3
SLIGHTLY STRESSED	B	25	37.9
MODERATE STRESS	C	18	27.3
QUITE STRESSED	D	4	6.1
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q30	STUDENTS PART-TIME WORK		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	12	18.2
SLIGHTLY STRESSED	B	21	31.8
MODERATE STRESS	C	24	36.4
QUITE STRESSED	D	7	10.6
VERY STRESSED	E	2	3.0
	Total	66	100.0

Q31	TIME FOR SPECIAL NEEDS PREPARATION		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	13	19.7
SLIGHTLY STRESSED	B	25	37.9
MODERATE STRESS	C	19	28.8
QUITE STRESSED	D	4	6.1
VERY STRESSED	E	5	7.6
	Total	66	100.0

Q32	SELF-EVALUATION PROGRAM		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	25	37.9
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	15	22.7
QUITE STRESSED	D	7	10.6
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q33	PLANNING TIME - LECTURES/LABS		
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	20	30.3
SLIGHTLY STRESSED	B	19	28.8
MODERATE STRESS	C	22	33.3
QUITE STRESSED	D	4	6.1
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q34 RUDE STUDENT BEHAVIOUR			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	24	36.4
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	13	19.7
QUITE STRESSED	D	8	12.1
VERY STRESSED	E	3	4.5
	Total	66	100.0

Q35 DEPARTMENTAL PAPER WASTE			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	16	24.2
SLIGHTLY STRESSED	B	12	18.2
MODERATE STRESS	C	16	24.2
QUITE STRESSED	D	17	25.8
VERY STRESSED	E	5	7.6
	Total	66	100.0

Q36 STUDENT IMMATURITY			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	9	13.6
SLIGHTLY STRESSED	B	20	30.3
MODERATE STRESS	C	20	30.3
QUITE STRESSED	D	11	16.7
VERY STRESSED	E	6	9.1
	Total	66	100.0

Q37STUDENTS WITH WEAK MATH AND LANGUAGE SKILLS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	7	10.6
SLIGHTLY STRESSED	B	16	24.2
MODERATE STRESS	C	21	31.8
QUITE STRESSED	D	14	21.2
VERY STRESSED	E	8	12.1
	Total	66	100.0

Q38 UNCLEAR STUDENT CAREER GOALS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	20	30.3
SLIGHTLY STRESSED	B	16	24.2
MODERATE STRESS	C	22	33.3
QUITE STRESSED	D	6	9.1
VERY STRESSED	E	2	3.0
	Total	66	100.0

Q39 LOW FACULTY SELF-ESTEEM			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	36	54.5
SLIGHTLY STRESSED	B	13	19.7
MODERATE STRESS	C	11	16.7
QUITE STRESSED	D	3	4.5
VERY STRESSED	E	3	4.5
	Total	66	100.0

Q40 LOW STUDENT SELF-ESTEEM			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	12	18.2
SLIGHTLY STRESSED	B	20	30.3
MODERATE STRESS	C	18	27.3
QUITE STRESSED	D	13	19.7
VERY STRESSED	E	3	4.5
	Total	66	100.0

Q41 PERFORMANCE ON ASSIGNMENTS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	15	21.1
SLIGHTLY STRESSED	B	13	19.3
MODERATE STRESS	C	20	29.8
QUITE STRESSED	D	14	22.8
VERY STRESSED	E	4	7.0
	Total	66	100.0

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Q42 FACULTY LACK OF MOTIVATION			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	19	28.8
SLIGHTLY STRESSED	B	18	27.3
MODERATE STRESS	C	15	22.7
QUITE STRESSED	D	11	16.7
VERY STRESSED	E	3	4.5
	Total	66	100.0

Q43 STUDENT LACK OF MOTIVATION			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	10	15.2
SLIGHTLY STRESSED	B	12	18.2
MODERATE STRESS	C	20	30.3
QUITE STRESSED	D	13	19.7
VERY STRESSED	E	11	16.7
	Total	66	100.0

Q44 FACULTY JOB SECURITY			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	27	40.9
SLIGHTLY STRESSED	B	9	13.6
MODERATE STRESS	C	6	9.1
QUITE STRESSED	D	8	12.1
VERY STRESSED	E	16	24.2
	Total	66	100.0

Q45 FACULTY CHEMICAL DEPENDENCY			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	38	57.6
SLIGHTLY STRESSED	B	22	33.3
MODERATE STRESS	C	4	6.1
QUITE STRESSED	D	1	1.5
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q46 STUDENT CHEMICAL DEPENDENCY			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	31	47.0
SLIGHTLY STRESSED	B	12	18.2
MODERATE STRESS	C	7	10.6
QUITE STRESSED	D	12	18.2
VERY STRESSED	E	4	6.1
	Total	66	100.0

Q47 FACULTY HEALTH/LIFESTYLE			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	29	43.9
SLIGHTLY STRESSED	B	23	34.8
MODERATE STRESS	C	10	16.2
QUITE STRESSED	D	3	4.5
VERY STRESSED	E	1	1.5
	Total	66	100.0

Q48 STUDENT HEALTH/LIFESTYLES			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	26	39.4
SLIGHTLY STRESSED	B	13	19.7
MODERATE STRESS	C	12	18.2
QUITE STRESSED	D	11	16.7
VERY STRESSED	E	4	6.1
	Total	66	100.0

Q49 FACULTY PERSONAL/EXTERNAL PROBLEMS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	29	43.9
SLIGHTLY STRESSED	B	19	28.8
MODERATE STRESS	C	10	15.2
QUITE STRESSED	D	7	10.6
VERY STRESSED	E	1	1.5
	Total	66	100.0

Table 3 con't

Q50 STUDENT PERSONAL/EXTERNAL PROBLEMS			
Value Label	Value	Frequency	Percent
LEAST STRESSED	A	17	25.8
SLIGHTLY STRESSED	B	12	18.2
MODERATE STRESS	C	16	24.2
QUITE STRESSED	D	19	28.8
VERY STRESSED	E	2	3.0
	Total	66	100.0

Table 4 - Stress Factors Among College Educators From Highest to Lowest

1.	Student Literacy/Numeracy Skills	69.7%	21.	Unclear Student Career Goals	45.4%
2.	Indoor Air Quality	68.2%	22.	Multicultural Issues	45.4%
3.	Student Lack of Motivation	66.7%	23.	Faculty Lack of Motivation	43.9%
4.	Availability of Supplies and Resources	66.7%	24.	Time for Special Needs Preparation	42.5%
5.	Student with Weak Mathematics/Languages	65.1%	25.	Noise in the Classroom	42.4%
6.	Marking Load	61.4%	26.	Planning time for Lectures/Labs	40.9%
7.	Large Class Size	60.5%	27.	Commuting	39.4%
8.	Performance on Assignments	59.6%	28.	Supervisor Relationship	37.9%
9.	Departmental Paper Waste	57.6%	29.	Rude Student Behaviour	36.3%
10.	Intra-Campus Politics	56.1%	30.	Disruptive Students	34.9%
11.	Student Immaturity	56.1%	31.	Self-Evaluation of Program/Teaching Methods	34.8%
12.	Student Personal/External Problems	56.0%	32.	Staff Relationships	31.9%
13.	Student Listening Skills	53.0%	33.	Students Entering/Leaving Class	31.8%
14.	Paperwork Required	51.6%	34.	Meetings During Semester	30.3%
15.	Low Student Self-Esteem	51.5%	35.	Faculty Personal/External Problems	27.3%
16.	Student Part-Time Work	50.0%	36.	Lack of Professional Development Opportunities	25.8%
17.	Curriculum Covered During a Semester	50.0%	37.	Low Faculty Self-Esteem	25.7%
18.	Time Management	50.0%	38.	Faculty Personal/External Problems	27.3%
19.	Time Table Co-ordination	45.5%	39.	Faculty Health/Lifestyle	21.2%
20.	Faculty Lack of Motivation	43.9%	40.	Faculty Chemical Dependency	9.1%

By excluding the suburban campus from the results, the results for the five most stressful factors can be summarized in Table (5) and Figures 11-15 (Appendix D).

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Table 5 - The Most Stressful Factors Among College Educators Excluding The Suburban Campus		
1.	Indoor Air Quality	73.7%
2.	Student Literacy/Numeracy Skills	71.9%
3.	Student Lack of Motivation	68.4%
4.	Available Supplies and Resources	66.7%
5.	Students with Weak Math and Languages	66.6%

No significant difference in the stress level was found for the other demographic variables.

The List of Coping Strategies from the Stress Workshop were as follows:

1. Improve problem solving skills to minimize the stressful factors cited by college faculty and increase self-awareness of stress symptoms.
2. Improve communication channels between faculty and management.
3. Encourage teachers to take personal time for hobbies and activities outside the college.
4. Offer workshops on stress management, relaxation, visual imagery, biofeedback, and cognitive restructuring.
5. Encourage a regular program of fitness and exercise to enable teachers to vent stress in an appropriate way and to reach optimal wellness.
6. Life-style planning for stress reduction.
7. Encourage interaction with peers (team building) and social support systems.
8. Help teachers to plan ahead, offer new ideas, techniques, and to rotate out of exhausting jobs.
9. Encourage staff members to express their ideas.

10. Involve staff in decisions that are relevant to them.
11. Taking a sabbatical leave.
12. Discuss with teachers the appropriate use of worry.
13. Assist teachers in lowering unrealistic expectations.
14. Manage stress through the use of humour.

Discussion of Findings

The Numeracy/Literacy Skills, Indoor Air Quality, Student Lack of Motivation, Available Supplies and Resources, and Students with Weak Mathematic/Language Skills, surprisingly were found to be the most stressful factors in this study. By excluding the results from the suburban campus indoor air quality was a major factor that caused the most stress among educators in metro campus locations. This issue in the era of environmental concerns should be looked at and assessed very carefully. It was surprising that faculty job security and students' personal or family problems were not among the ten most stressful factors (Figures 16-19, Appendix D). Vail (1990) reported in her study that the areas causing the most stress for elementary school teachers were as shown in Table (6): time management, paperwork, large class sizes, physical working conditions, and behavioral concerns. Larkin and Clagett (1981) found that the stress factors most frequently reported by Community College Faculty at Prince George's Community College, a suburban Maryland Institution, Maryland, United States of America were: lack of faculty participants in decision-making, the increase in under-prepared students coupled with students' expectations of high grades (which agrees with

our findings), apathetic peers, and low salaries (neither salary nor job security were major factors in our study).

Strategies for reducing stress as reported by Larkin and Clagett (1981) included: strict enforcement of prerequisite completion, realistic student placement, and the establishment of peer support networks. They also indicated that Professional Burnout presents a model for understanding stress, in which burnout is seen as a breakdown in the relationship between the individual and organization.

Table 6

Classroom Stressors Rated as Quite or Very Stressful (Vail 1990)

QUESTIONNAIRE ITEMS		Rating by Percent
Number	**Stressor**	**Percent**
13	More To Do and Less Time To Do It	62.7
27	Amount of Paper Work	61.3
33	Amount of Planning Time	57.0
26	Large Class Sizes	54.0
40	Internal Coverage	48.2
44	Large Number of Students in a Small Classroom	46.0
34	Rude, Disrespectful Behaviour	45.9
46	Administrative Responsibility	45.3
41	Apathy of Students Regarding Assignments	45.2
17	Poor Listening Skills	44.5

Greenwood (1990) reported that large class size was a major factor for raising stress levels of teachers. This factor was rated number seven in our study by 60.5% of participants.

Kyriacon and Stutcliffe (1978) found that there was "very little association between self-reported teacher stress and the biographical characteristics of gender, qualification, age, length of teaching experience, and position held in the school" (p.166). Our findings in general agree with the authors' findings.

In summary, the findings of this study suggest that the student literacy/numeracy skills, indoor air quality, student lack of motivation, available supplies and resources, and students with weak Mathematic/Languages were the five highest stress factors among Community College Educators. The five top coping strategies were to improve problem-solving and communication skills, encourage teachers to take personal time for hobbies, offer workshops on stress management, and encourage a regular program of fitness and exercise. Some of the findings agreed with similar studies reported in the literature and others did not. This study is unique and novel for Community Colleges in Canada, particularly in Ontario.

CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

The purpose of the study was to examine the most stressful factors among Community College Educators and to suggest possible solutions and coping strategies in a stress management workshop. The study was designed to examine various demographic variables such as gender, age range, level of education, years of employment, etc. on perceived stress levels.

A pilot study was conducted among 20 faculty members and the final study instrument (survey questionnaire) contained 50 questions (nine demographic and forty-one questions to determine stress factors). Sixty-six questionnaires were returned out of 125 (52.8%). Fifty-nine percent of participants were females and forty-one percent were males. The majority of respondents were full-time faculty (86%), half of them had completed Masters Degree. Half of the participants came after employment at the industry. Findings showed that the most stressful factors for all campus locations were:

- Student Literacy/Numeracy Skills
- Indoor Air Quality
- Student Lack of Motivation
- Availability of Supplies and Resources
- Students with Weak Math and Languages.

The most stressful factors, excluding the suburban campus, were:

- Indoor Air Quality
- Student Literacy/Numeracy Skills
- Student Lack of Motivation
- Available Supplies and Resources
- Students with Weak Math and Languages.

The most important coping strategies were:

- Improve Problem-Solving Skills
- Improve Communication Skills
- Participation in Hobbies and Outside Activities
- Life-Style Planning
- Build Social Support System
- Taking a Sabbatical Leave
- Stress Management.

Conclusion

The most important factors affecting stress among College Educators are related to students with weak Literacy/Numeracy skills and Math and Language skills; physical environment such as Indoor Air Quality (particularly in Metro Campus locations), Large Class Size, and Departmental Paper Waste; and Limited Availability of Supplies and Resources.

There were no significant differences in perceived stress levels by Gender and Age, but the stress levels at the Main Campus was much higher that the other campus locations, particularly the Suburban Campus. There was some agreement with the findings from this study and similar studies reported in the literature. The overall stress reported by the participants ranged from moderate to quite stressful (69.7%), considering all campus locations, and 73.7% by excluding the Suburban Campus results, which was much higher than elementary teachers who rated their stress level as moderate (46%) (Vail, 1990).

Recommendations

Based on the findings of this study, stressors among Community College Educators are diverse and numerous and if the magnitude of the problem which was found to be higher than expected will continue to increase in the near future, then my first recommendation is that an ounce of prevention is better than any type of short-or long-term cure. Solving the issues of indoor air quality and the Numeracy and Literacy skills is timely. Stress Management workshops and facilitating sabbatical leave for professional renewal would be beneficial to both the educators and the college. Management must acknowledge the existence of stress in College teaching, and must help teachers with various professional development opportunities. Although 74.3% of participants indicated that the professional development opportunity are available, educators are not taking full advantage of several opportunities that may transform their distress to eustress.

The best attitude and coping skills are inadequate defences for a job which is so poorly designed or managed that work itself literally makes people sick. I would recommend that college leaders assume the responsibility for establishing proper policies, procedures, politics, interpersonal communications, and working conditions that will ensure the well-being of their faculty. Recently, sagging productivity and rising employer health care costs have encouraged some employers to investigate ways to turn their workplaces into more health-enhancing environments. Providing on-the-job wellness and fitness centers is highly recommended. I would recommend focusing more on the long term optimal health and wellness programs than the short-term band-aid approach to solve acute stress problems. Employee assistance personnel should be utilized to develop professional development programs for college educators, emphasizing stress awareness and coping strategies, as well as crisis intervention techniques. Since stress seems like an endless circle where teaching may leave educators with so little energy for home that home turns into a battleground which leaves educators with little or no energy to teach. Counselling, at this point, is recommended at the earliest possible stages. Sometimes people never think seriously about fitness and wellness until it is too late (probably after getting their first heart attack or serious psychiatric disability). It is then recommended to increase teacher's awareness about the long-term benefits of stress management, physical fitness, weight control, proper nutrition, positive mental attitude, meditation techniques, and overall wellness.

Implications for Further Studies

It is my hope that this study will initiate several other studies to elucidate stress factors and coping strategies among College and University Educators across Canada. The effect of geographical and demographical factors warrant further investigations. Developing a model system for educators' wellness and renewal requires further clarification. It would also be worthwhile to follow up a sample of College Educators who have been through a Stress Management/Wellness program and study the difference between their coping skills versus a matched control group of educators. Do the major stress factors found in this study have similarities in other Ontario/Canadian Colleges?

In conclusion, the most important point about stress is not what is out there that is the problem, but it is how we react to it. Some educators sit in the back, eyes shut, jaws clenched. they can't wait for the ordeal in the torture chamber to end and get back on solid ground. Up front are those wide eyed thrill seekers who relish every steep plunge and can't wait to get on the next ride. In between are those who are seemingly quite nonchalant or even bored. These three types are all having exactly the same experience, the roller coaster ride, but they are reacting to it very differently: bad stress, good stress, and no stress.

The Chinese word for crisis is "Weiji", two characters that separately mean danger and opportunity. Every problem faced by educators can be viewed as a chance to show an ability to handle a problem. Changing the way teachers think by viewing distressful situations as an opportunity to improve problem-solving skills, can change distress to eustress for teachers as well as for their students.

References

Allen, D. Hitt, M. & Greer, C. (1982). Occupational stress and perceived organization effectiveness in formal groups: An examination of stress level and stress type. Personnel Psychology 35 (2),b359-371.

Austin, Dean A. (1981). The teacher burnout issue. Journal of Physical Education, Recreation & Dance, 52, 35-36.

Blase, Joseph J. (1986). Qualitative analysis of sources of teacher stress: Consequences for performance. American Educational Research Journal, 23, 13-40.

Bureau, J.L. (1983). Stress can be good for you. Toronto Business, 30-31.

Canadian Mental Health Assocition. (1984) Work and well-being: The changing realities of empolyment: A popular summary. Toronto: Canadian Mental Health National Office.

Caplan, R.D., Cobb, S. & French, J. (1975). Relationships of cessation of smoking with job stress, personality and social support. Journal of Applied Psychology, 60, 211-219.

Catterton, Brenda L. (1979). Teaching stress events inventory. Portland study of teachers. American Federation of Teachers, Washington, D.C., (ERIC Document No. ED. 185042).

Cedoline, A.J. (1982). Job burnout in public education: Symptoms, causes and survival skills. New York: Teachers College Press, Colombia University.

Cherniss, C. (1980). Staff burnout. Beverly Hills: Sage.

Connolly, C. and Saunders, W. (1988). Successful coping strategies -- The answer to teacher stress. Paper Presented to the Annual Meeting of the Association of Teacher Educators, San Diego. (ERIC Document ED. 290723).

Cunningham, W.G. (1983). Teacher burnout - Solutions for the 1980s: A review of the literature. The Urban Review, 15(1), 52-55.

Davis, F. William (1981). Job satisfaction and stress. Journal of Physical Education, Recreation & Dance, 52, 37-38.

Dunham, Jack (1984). Stress in teaching. (ERIC Document No. ED 252505)

Dworkin, Anthony Gary (1990). Stress and illness behaviour among urban public school teachers. Educational Administration Quarterly, 26, 60-72.

Eaton, J.W. (1980). Stress in social work practice. In C. Cooper and J. Marshall (Eds.), White collar and professional stress (pp.167-185). U.S.A: John Wiley & Sons.

Esteve, J.M., Fracchia, A.F.B. (1986). Inoculation against stress: A technique for beginning teachers. European Journal of Teacher Education, 9, 261-69.

Farber, Barry A. (1984). Teacher burnout: Assumptions, myths, and issues. Teachers College Record, 86, 321-28.

Farrugia, Charles (1986). Career-choice and sources of occupational satisfaction and frustration among teachers in Malta. Comparative Education, 22, 221-31.

Fielding, Marianne A., Gall, Meredith D. (1982). Personality and situational correlates of teacher stress burnout. Paper Presented at the Annual Meeting of the American Educational Research Association (New York, N.Y.).

Fimian, Michael J. (1985). The development of an instrument to measure occupational stress in teachers of exceptional students. Techniques, 1, 270-85.

Fimian, Michael J. (1987). Alternate-forms and Alpha reliability of the teacher stress inventory. Psychology in the Schools, 24, 234-36.

Fimian, Michael J. (1988). The Alpha and split-half reliability of the teacher stress inventory. Psychology in the Schools, 25, 110-18.

Finn, E. (1982). Combating stress in the workplace. Worklife 2, 2-3

Ford, J., Ford, J. and Weingard, S. (1985). Organizational wellness: New slant for E.A.P.'s. EAP Digest, 49-54.

Fortin, Jean-Claude; Boucher, R. Claude (1987). Stress and perception of the level of structuration in schools by the teachers. (ERIC Document No. ED. 295335).

Friesen, David (1988). Why Teachers Burnout. Educational Research Quarterly, 12, 9-19.

Golaszewski, Thomas J. (1984). Organizational and health manifestations of teacher stress: A preliminary report on the Buffalo teacher stress intervention project. Journal of School Health, 54, 458-63.

Gold, Y. (1985a). Burnout: Causes and solutions. Clearing House, 58 (5), 210-212.

Gold, Y. (1985b). Does teacher burnout begin with student teaching? Education, 105 (3), 254-257

Goldberg, P. (1978). Executive health. U.S.A.: McGraw Hill.

Gootlieb, B.H. (1983). Social support strategies: Guidelines for mental health practice. Beverly Hills, California: Saga.

Greenwood, Gordon E. (1990). Relationship between four teacher efficacy belief patterns and selected teacher characteristics. Journal of Research and Development in Education, 23, 102-06.

Halpin, Glennell (1985). Teacher stress as related to locus of control, sex and age. Journal of Experimental Education, 53, 136-40.

Harris, Karen R. and Others (1984). Teacher characteristics as related to five dimensions of teacher stress, sex and age. (ERIC Document No. ED. 246035)

Hensley, Robin (1989). Instructional choices in language arts: Reality or illusion. Paper Presented at the Annual Meeting of the National Reading Conference.

Hicks, F. (1983). The mental health of teachers, New York: Cullman and Ghertner.

Hiebert, Bryan; Farber, Ian (1984). Teacher stress: A literature survey with a few surprises. Canadian Journal of Education, 9, 14-27.

Hofman, J.E., and Kremer, L. (1981). Professional identity and teacher dropout. Studies in Education (Hebrew), 31, 99-108.

Hoover-Dempsey, Kathleen V., and Kendall, Earline D. (1982). Stress and coping among teachers: Experience in search of theory and science. Final Report. George Peabody College for Teachers, Nashville, Tenn, (ERIC Document No. ED. 241503).

House, J.S. (1981). Addison-Wesley series on occupational stress: Work stress and social support. U.S.A.: Addison-Wesley.

Iandoli, Ce Ce (1987). Twenty spring rolls and one plastic rose: Teaching business writing to America's new immigrants. Bulletin of the Association for Business Communication, 50, 16-18.

Kalker, P. (1984). Teacher stress and burnout: Causes and coping strategies. Contemporary Education, 56 (4).

Kremer, L., and Hofman, J.E. (1985). Teachers' professional identity and burnout. Research in Education, 34, 89-95.

Kutash, I., Schlessinger, L.B., and Associates. (1980). Handbook on stress and anxiety. San Francisco: Jossey-Bass Inc.

Kyriacou, C., and Suttcliffe, J. (1978a). A model of teacher stress. Educational Studies, 4 (1), 1-6

Kyriacou, C., and Suttcliffe, J. (1980). Handbook on stress and anxiety. San Francisco: Jossey-Bass Inc.

Kyriacou, C., and Suttcliffe, J. (1978b). Teacher stress prevalence, sources and symptoms. British Journal of Educational Psychology, 48, 159-167.

Kyriacou, C., and Suttcliffe, J. (1979). A note on teacher stress and locus of control. Journal of Occupational Psychology, 52, 227-228.

Landsman, L. (1978). Is teaching hazardous to your health? Today's Education, April-May.

Larkin, Paul, and Clagett, Craig (1980). Sources of faculty stress and strategies for its management. Prince George's Community College, Largo, M.D. Office of Institutional Research, (ERIC Document No. ED. 195310).

Levi, L. (1981). Addison-Wesley series on occupational stress: Preventing work stress.

MacBride, A. (1983a). Burnout: Possible, probable, preventable. Canada's Mental Health, 31, 91, 2-3.

MacBride, A. (1983b). Stress among air traffic controllers and other government workers: Implications for stress management in the workplace. Unpublished Manuscript, Social and Community Psychiatry Section of Clarke Institute of Psychology, Toronto.

MacBride, A. (1984). High stress occupations: The importance of job components versus job categories. In R.J. Burke (Ed.), Current issues in occupational stress: Research and intervention (pp.3-24).

Mansell, J. (1980). Issues in the quality of working life: Dealing with some obstacles to innovation in the workplace. Ottawa: Labour Canada.

Martinez, J.G. (1989). Cooling off before burning out. Academic Therapy 24(3), 271-284.

Maslach, C. (1982). Burnout - The cost of caring. New Jersey: Prentice-Hall Inc.

Maslach, C., and Jackson, S. (1981). The measurement of experienced burnout. Journal of Occupational Behaviour, 2, 99-113.

McIntyre, T.C. (1982). An investigation of the relationship among burnout, locus of control, and selected personal/professional factors in special education teachers. (Doctoral Dissertation, University of Connecticut, 1981): University Microforms International.

McIntyre, T.C. (1982). Factors related to burnout: A review of research literature. Paper Presented at the Annual International Convention for the Council for Exceptional Children, Houston, April 11-16. (ERIC Document No. ED. 218908).

McIntyre, T.C. (1984). Teacher stress and burnout: A review of research literature. Information Analysis (070) (ERIC Document No. ED. 236868).

McLaughlin, T. (1984). The priorities of principals. A Paper Presented to the Annual Meeting of the National Catholic Educational Association (81st), Boston. (ERIC Document No. ED. 246544).

Meinke, Dean L. (1982). Perceived stress events by teachers. Paper Presented at the Annual Meeting of the American Psychological Association (Washington, D.C.), 14.

Moll, Marita (1982). Teacher stress: Bibliographies in education. No. 75. Canadian Teacher's Federation, Ottawa (Ontario), (ERIC Document No. ED. 222459).

Moracco, J., and McFadden, J.H. (1980). Counsellor's role in reducing teacher stress. unpublished, Auburn University.

Nummela, R.M. (1982). The number of teacher adaptations can predict burnout. Education, 103 (1), 79-81.

O'Brien, Dianne Boswell (1981). Coping with occupational stress. Journal of Physical Education, Recreation & Dance, 52, 44-48.

Parker, D.F. & DeCotiis, A.D. (1983). Organizational determinants of job stress. Organizational Behaviour and Human Performance, 32, 160-177.

Perlman, H. & Litt, D. (1982). The client as worker: A look at an overlooked role. In S.H. Akabas & P.A. Kurzman (Eds.), Work, workers and work organization: A view from social work (pp. 90-115). New Jersey: Prentice Hall.

Pettegrew, Loyd S.; Wolf, Glenda E. (1981). Validating measures of teacher stress. George Peabody College for Teachers, Nashville, Tenn. (ERIC Document No. ED 213743).

Pike, D. (1985). Effective management for the '80s. EAP Digest, 65-69.

Pine, A., Aroinson, E. Kafry, D. (1981). Burnout from tedium to personal growth. New York: The Free Press.

Remer, R. (1984). Personal approaches to stress reduction: A workshop. School Psychological Review, 13 (2) 244-248

Rogers, J. & Cochrane, J. (1984). Life event stress: Implications for the workplace. Canada's Mental Health, 32, 2-5.

Ruddy, S.L.G. (1983). Burnout in the teaching profession: An exploratory study. M.Sc. Dissertation, University of Calgary.

Saffer, S. (1984). Stress and the educational administration: A synthesis of dissertation research. A Paper Presented at the Annual Meeting of the American Educational Research Association, New Orleans, April. (ERIC Document No. ED. 249568).

Saunders, Robert Ronald; Watkins, J. Foster (1982). Teacher burnout/stress management: An exploratory look in an urban school system in Alabama. (ERIC Document No. ED 225940).

Scaros, Barbara C. (1981). Sight on sites: An approach to coping with teacher stress - Preventing burnout. New York City Teacher Centers Consortium, NY, (ERIC Document No. ED 236131).

Schwab, R.L., and Iwanicki, E.F. (1982). Perceived role conflict, role ambiguity, and teacher burnout. Educational Administration Quarterly, 18 (1), 60-74.

Selye, H. (1956). The stress of life: Toronto, McGraw-Hill.

Selye, H. (1981). Dealing with stress in a depressed economy. Spectrum, 2, 3-12. 50.

Sinclair, Ken; Nicoll, Vivienne (1981). Sources and experience of anxiety in practice teaching. South Pacific Journal of Teacher Education, 9, 1-18.

Soh, Kay Cheung (1986). Teacher locus of control scale: A validity study. Occasional Paper No. 28. (ERIC Document No. ED. 280868).

Stout, J.K., and Williams, J.M. (1983). Comparison of two measures of burnout. Psychological Reports, 53, 283-289.

Swick, Kevin J.; Hanley, Patricia E. (1980). Stress and the classroom teacher. What research says to the teacher. National Education Association, Washington, D.C., (ERIC Document No. ED. 201639).

Trist, E. (1977, November). Adopting to a changing world. Paper Presented at the Sixth International Personnel Conference, Montreal, Canada.

Vail, N.H. (1990). Classroom stressors and coping strategies. M.Ed. Project, Brock University, St. Catherines, Ontario, Canada

Vance, Booney (1989). Sources and manifestation of occupational stress as reported by full-time teachers working in a BIA school. Journal of American Indian Education, 28, 21-31.

Wallis, C. (1983). Stress, can we cope? Time, 6, 51-61.

Wangberg, E.G. (1982). Helping teachers cope with stress. Educational Leadership, 39 (6), 452-454.

Whiteman J.L., Young, J.C., and Fisher, M.L. (1985). Teacher burnout and the perception of student behaviour. Education, 105 (3), 229-305.

Wilson, David (1990). Type A behaviour and self-reported stress among Zimbabwean teachers. Journal of Social Psychology, 130, 115-116.

Woodhouse, D.A. (1985). Taking control of stress in teaching. British Journal of Educational Psychology, 55, 119-23.

Ysseldyke, James E. (1988). Alternate explanations for learning disabled, emotionally disturbed, and educable mentally retarded students' math achievement. Research Report No. 10, Minnesota University, Minneapolis. ERIC Document No. ED. 304812).

Ysseldyke, James E. (1988). Alternate explanations for learning disabled, emotionally disturbed, and educable mentally retarded students' math achievement. Research Report No. 11, Minnesota University, Minneapolis. (ERIC Document No. ED. 304812).

PILOT STUDY EVALUATION TO IDENTIFY STRESSORS AMONG SENECA COLLEGE FACULTY

1. Which item(s) did you find difficult to answer?

2. Please explain the difficulty for each item in question 1.

3. Are there any items which you feel redundant?

4. Are there any items which are unclear and need to be reworded?

5. Please indicate those items which you do not feel are classroom stressors.

6. Is there anything that you feel has been left out and should be included?

A SURVEY TO IDENTIFY STRESSORS AMONG COLLEGE FACULTY

1	A	B	C	D	E	1.	Campus Location: (A) Main Campus, (B) Suburban Campus, (C) Campus A, (D) Campus B, (E) Campus C
2	A	B	C	D	E	2.	Program Types: (A) Applied Arts (B) Business, (C) Health Sciences, (D) Technology & Computer Studies, (E) English
3	A	B	C	D	E	3.	Specialization Types: (A) ECE, (B) Business Admin, (C) Nursing & Bio-Sciences, (D) Engineering Technology Computer Studies, (E) English
4	A	B	C	D	E	4.	Gender: (A) Female, (B) Male
5	A	B	C	D	E	5.	Age Range: (A) 24-29 (B) 30-34 (C) 35-39 (D) 40-49 (E) 50 and over
6	A	B	C	D	E	6.	Employment Status: (A) Full-time (Day), (B) Part-time, (C) Sessional/Partial load (D) Cont. Education
7	A	B	C	D	E	7.	Highest Level of Education to Date: (A) Bachelor's degree (B) Master's degree (C) Doctorate degree (D) Technology diploma (E) No formal education
8	A	B	C	D	E	8.	Number of Years Employed at the College: (A) 0 to 5 (B) 6 to 10 (C) 11 to 15 (D) 16 to 20 (E) over 20
9	A	B	C	D	E	9.	Before joining the College, you came from: (A) straight from Univ./College (B) Teaching at Univ./College (C) Working for Industry

Indicate the extent to which each of the items is stressful to you in the classroom setting using the following scale: (A) least stressful (B) slightly stressful (C) moderately stressful (D) quite stressful (E) very stressful

10	A	B	C	D	E	10.	Relationship with supervisor/administrator
11	A	B	C	D	E	11.	Intra Campus Politics
12	A	B	C	D	E	12.	Amount of marking to be done (Term Tests, Exams, Lab Reports ... etc.
13	A	B	C	D	E	13.	More things to do and less time in which to do them (Time Management)
14	A	B	C	D	E	14.	Commuting to and from campus location daily
15	A	B	C	D	E	15.	Amount of noise in the classroom/labs (fans, instruments and/or students)
16	A	B	C	D	E	16.	Indoor Air Quality problems at Campus
17	A	B	C	D	E	17.	Poor listening skills of students
18	A	B	C	D	E	18.	The number of meeting scheduled during the semester
19	A	B	C	D	E	19.	Students entering and leaving during classes or arriving late.
20	A	B	C	D	E	20.	Availability of supplies resources and funding.
21	A	B	C	D	E	21.	Staff relationships
22	A	B	C	D	E	22.	Lack of Professional Development Opportunities on Campus.
23	A	B	C	D	E	23.	Numeracy and Literacy skills of students
24	A	B	C	D	E	24.	Amount of curriculum to cover during the semester.
25	A	B	C	D	E	25.	Multicultural issues
26	A	B	C	D	E	26.	Large class sizes in lectures and labs
27	A	B	C	D	E	27.	Amount of paperwork
28	A	B	C	D	E	28.	Lack of co-ordination in time - tables for lectures and labs
29	A	B	C	D	E	29.	Proportion of disruptive students placed in one class
30	A	B	C	D	E	30.	Students working part-time during the semester
31	A	B	C	D	E	31.	Amount of time to prepare for students with special needs
32	A	B	C	D	E	32.	Self-evaluation of programme and teaching methods

33	A	B	C	D	E	33.	*Amount of planning time for lecture and labs*
34	A	B	C	D	E	34.	*Rude, disrespectful behaviour of students*
35	A	B	C	D	E	35.	*Departmental paper waste*
36	A	B	C	D	E	36.	*Lack of student maturity to do postsecondary education*
37	A	B	C	D	E	37.	*Number of students in the class with a need for special programming (Math, English ...etc)*
38	A	B	C	D	E	38.	*Lack of clarity in career goals among students*
39	A	B	C	D	E	39.	*Low self - esteem among faculty*
40	A	B	C	D	E	40.	*Low self - esteem among students*
41	A	B	C	D	E	41.	*Indifference and apathy of students regarding assignments*
42	A	B	C	D	E	42.	*Lack of motivation among faculty*
43	A	B	C	D	E	43.	*Lack of motivation among students*
44	A	B	C	D	E	44.	*Job security issue for faculty*
45	A	B	C	D	E	45.	*Chemical dependency among faculty*
46	A	B	C	D	E	46.	*Chemical dependency among students*
47	A	B	C	D	E	47.	*Health & Lifestyle issues for faculty*
48	A	B	C	D	E	48.	*Health & Lifestyle issues for students*
49	A	B	C	D	E	49.	*External personal problems (Faculty)*
50	A	B	C	D	E	50.	*External personal problems (Students)*

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MEMORANDUM

From: George Nathan, Chairman,
Sub-Committee on Research with Human Participants

To: Michael Kompf, Faculty of Education

The Committee has reviewed George Grant's proposal, Stress Factors Among Community College Educators, and finds it acceptable.

September 18, 1991

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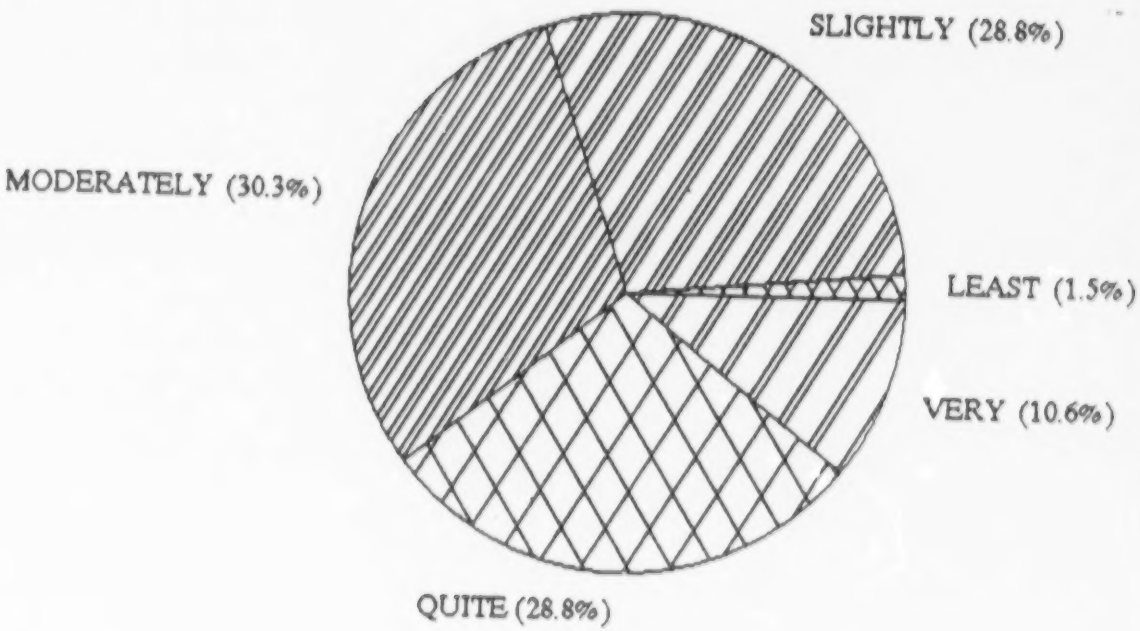

Figure 1 – Student Literacy and Numeracy Skills

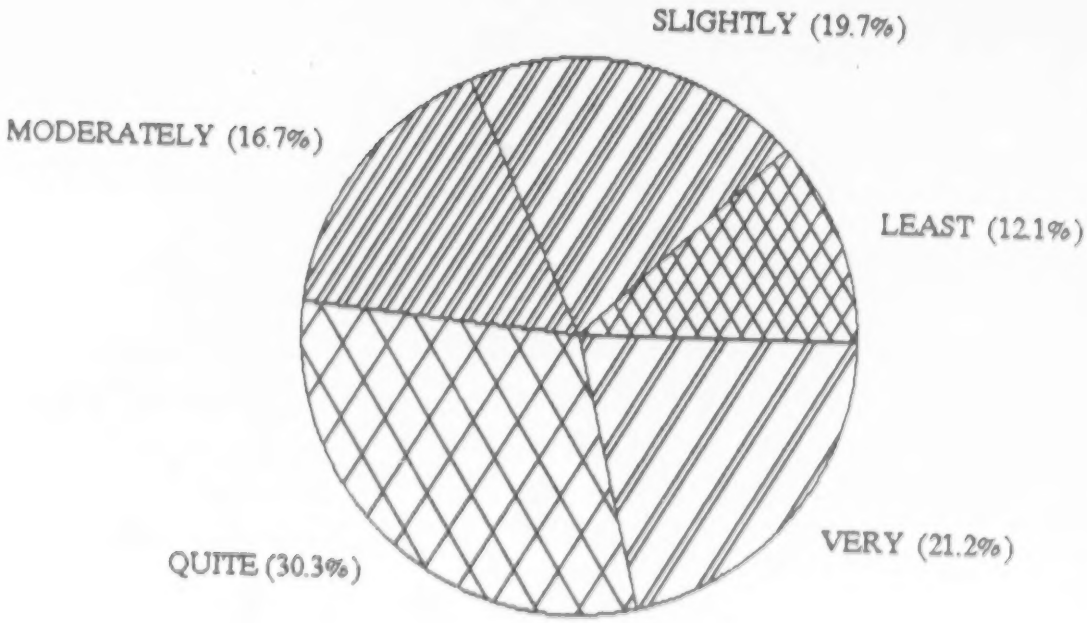

Figure 2 – Indoor Air Quality

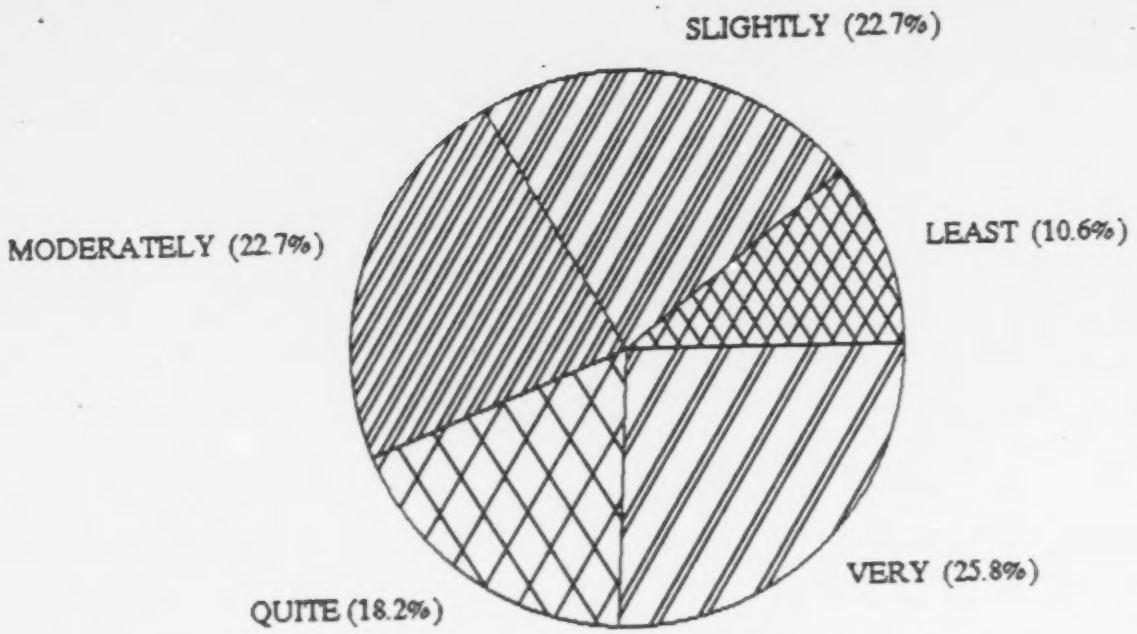

Figure 3 – Student Lack of Motivation

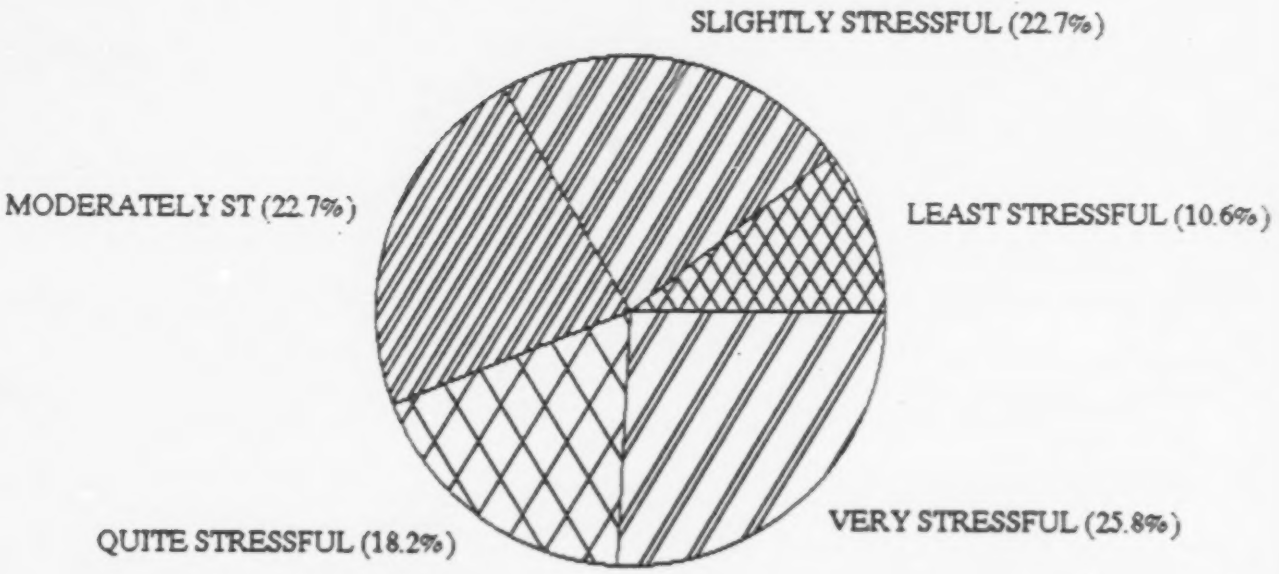

Figure 4 – Available Supplies and Resources

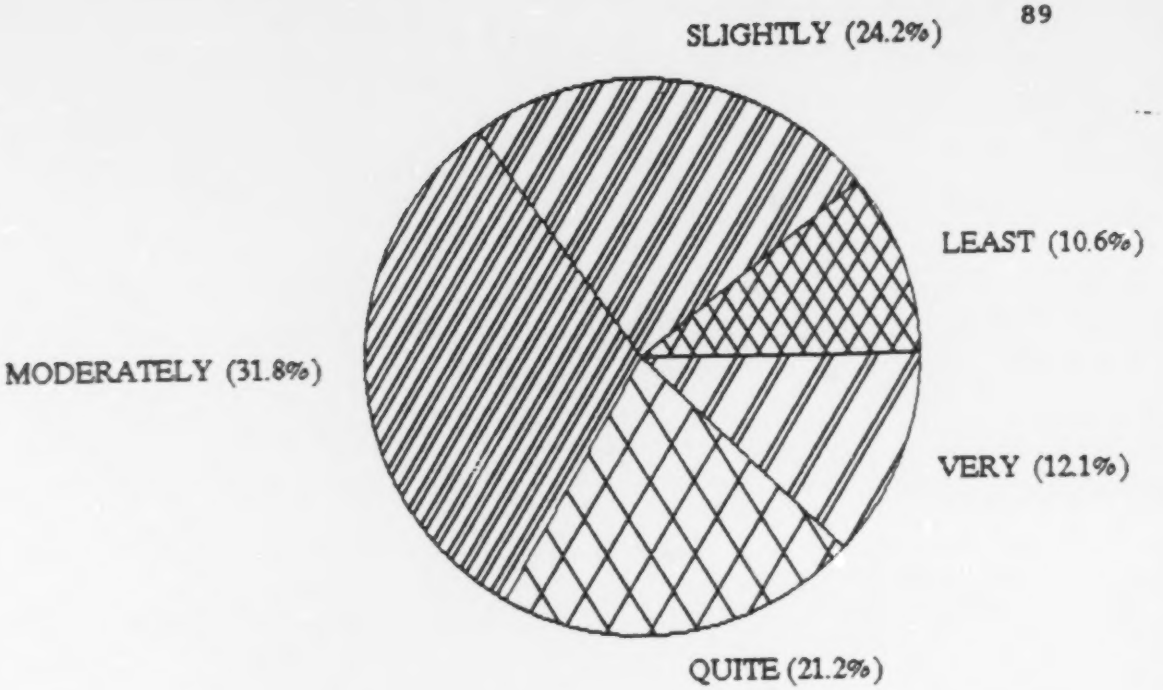

Figure 5 – Students Weak in Math and Languages

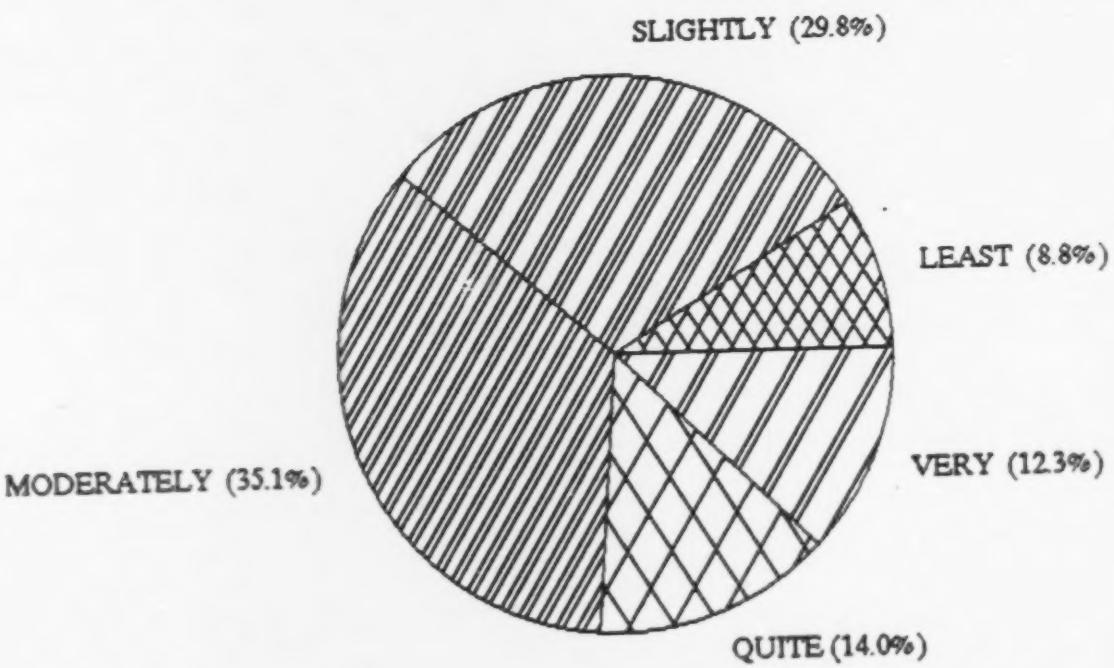

Figure 6 – Marking Load

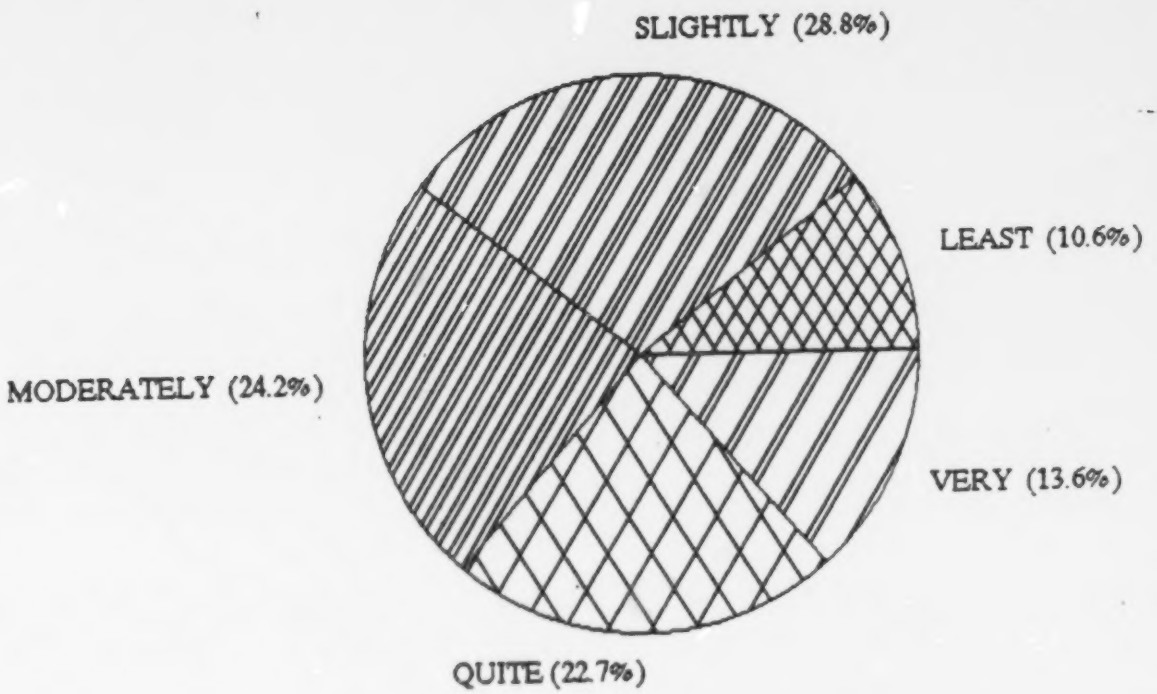

Figure 7 – Large Class Size

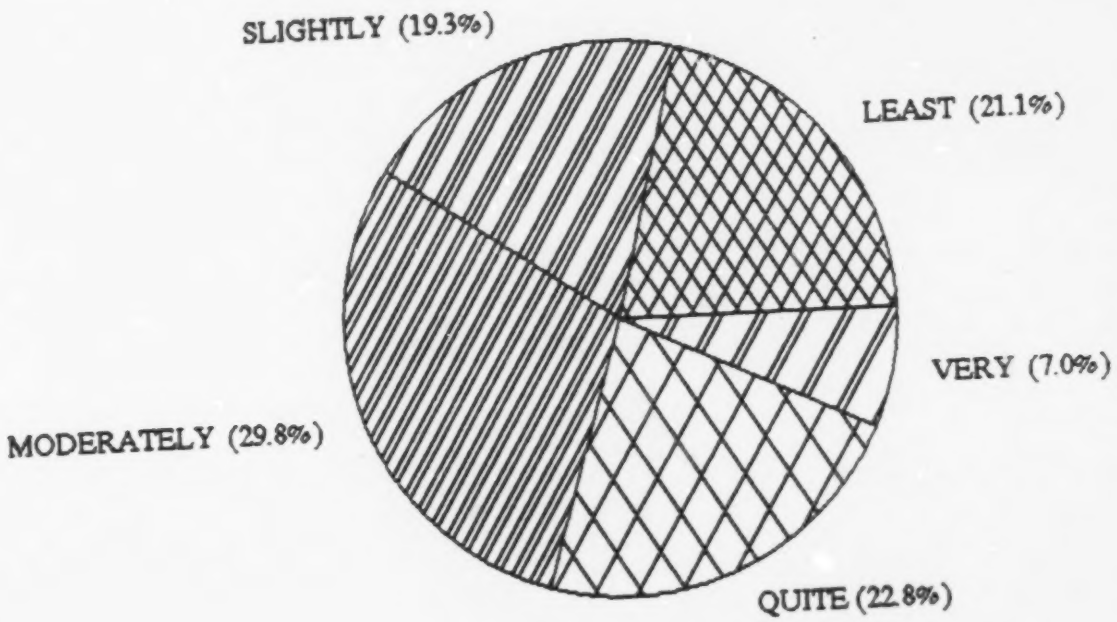

Figure 8 – Performance on Assignments

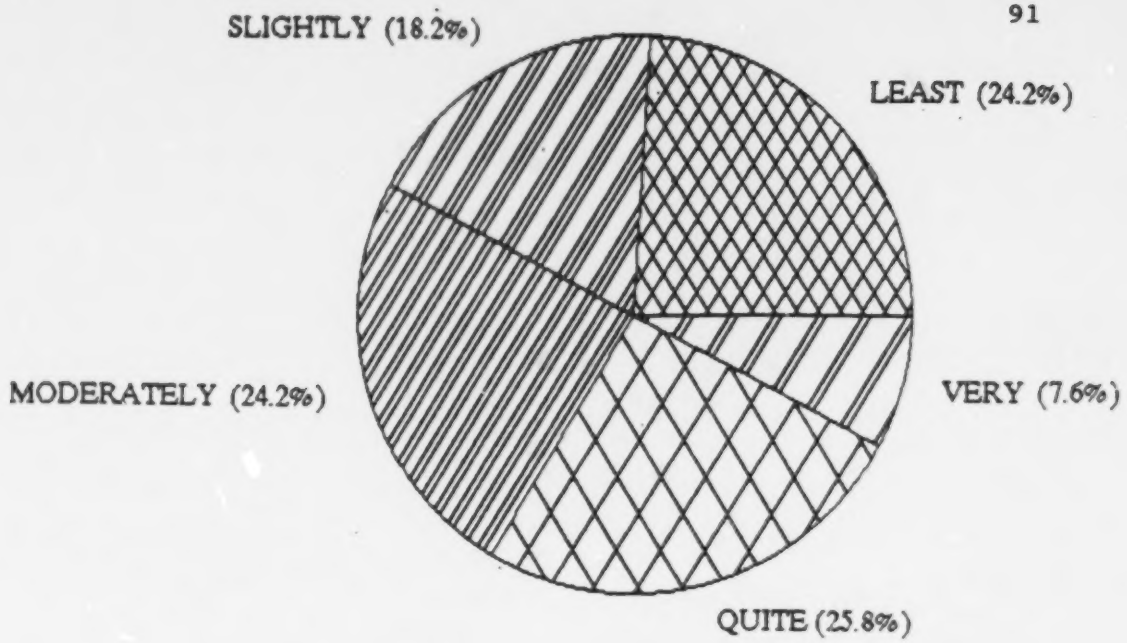

Figure 9 – Departmental Paper Waste

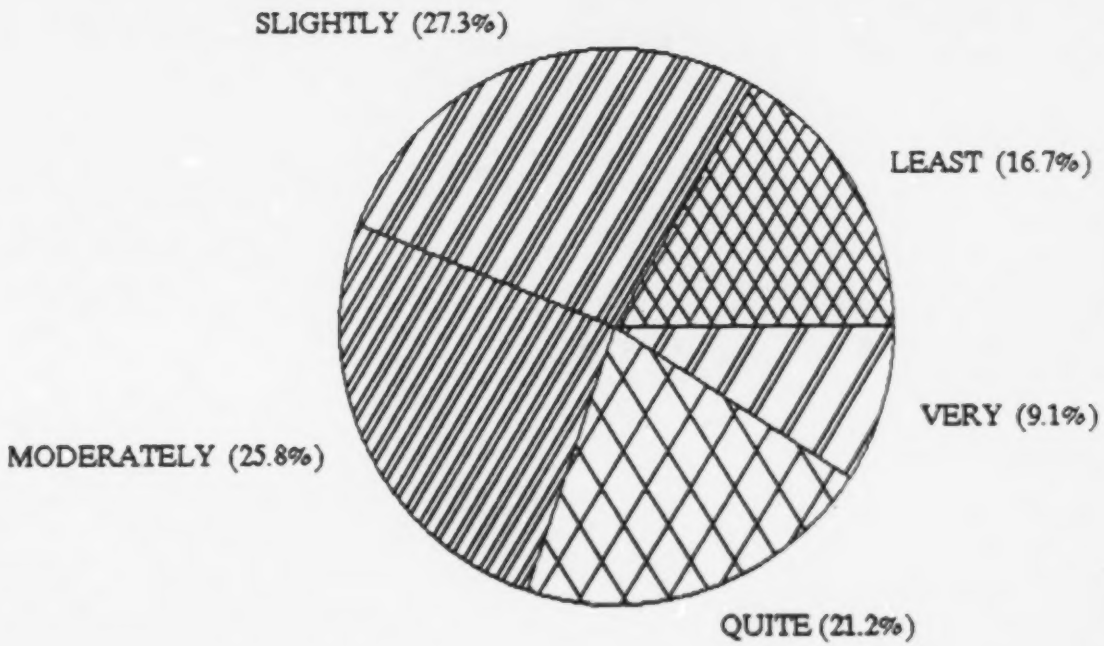

Figure 10 – Intra–Campus Politics

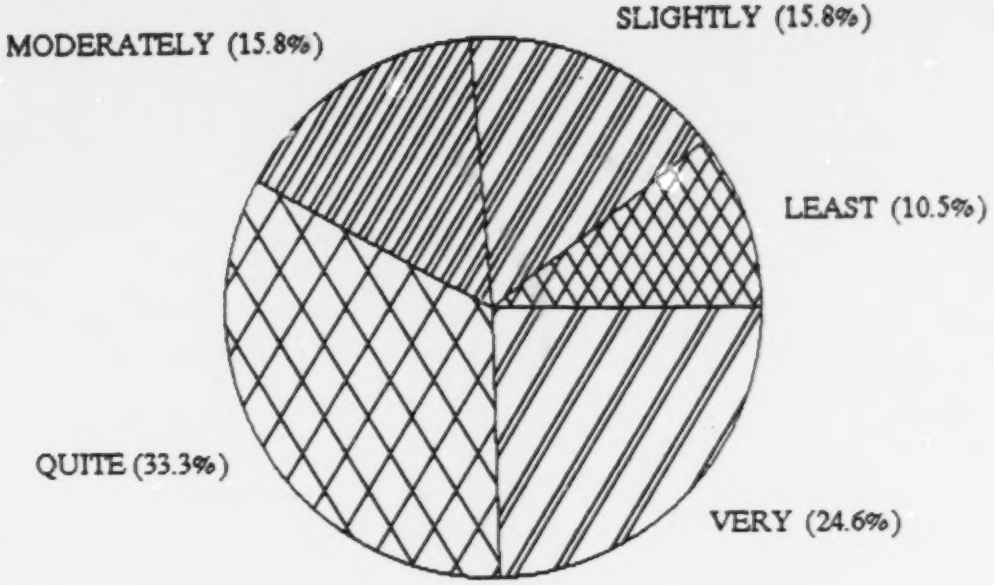

Figure 11 – Indoor Air Quality
(excluding the suburban campus)

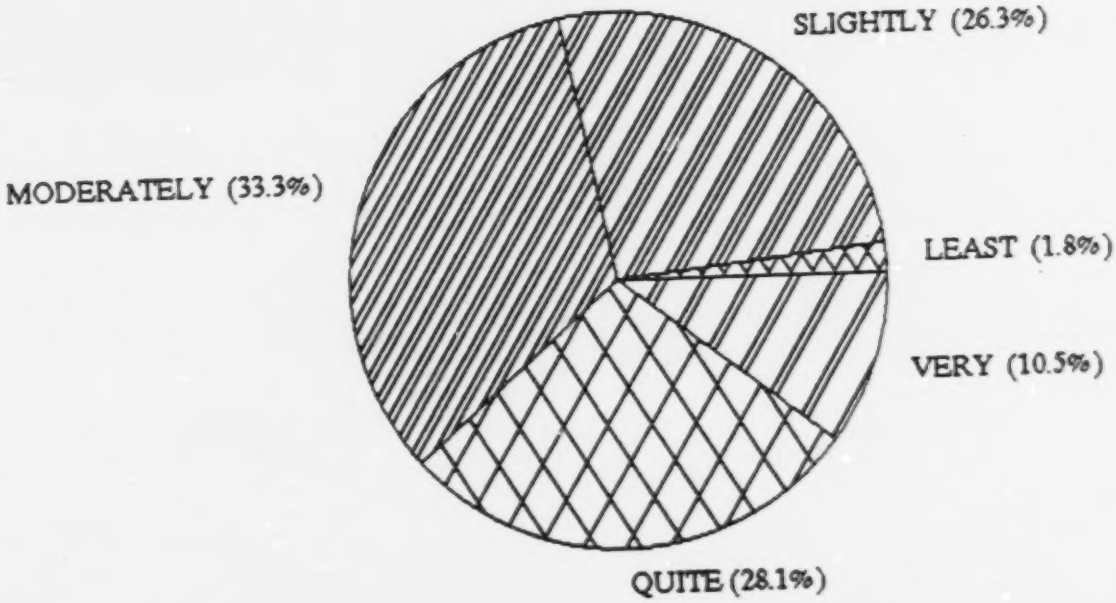

Figure 12 – Student Literacy and Numeracy
(excluding the suburban campus)

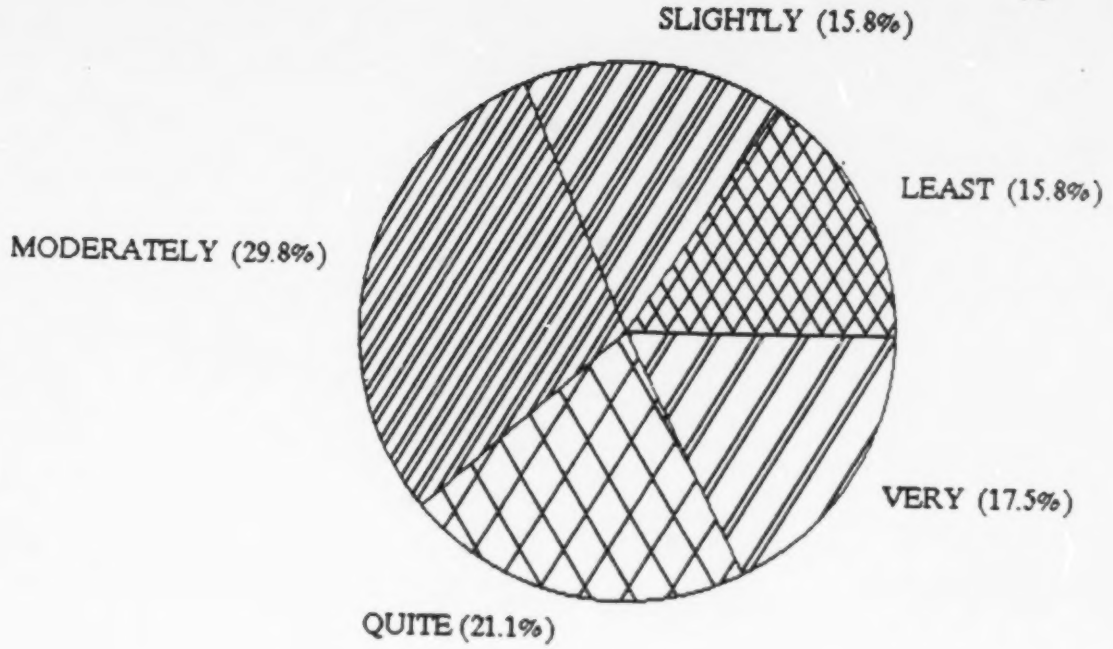

Figure 13 – Student Lack of Motivation
(excluding the suburban campus)

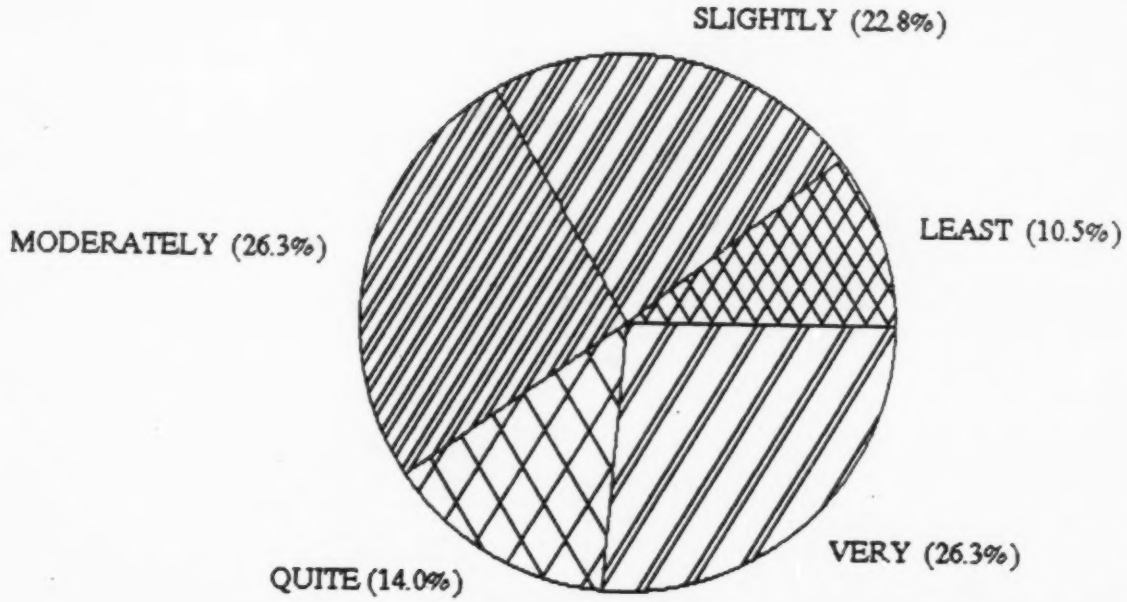

Figure 14 – Available Supplies and Resources
(excluding suburban campus)

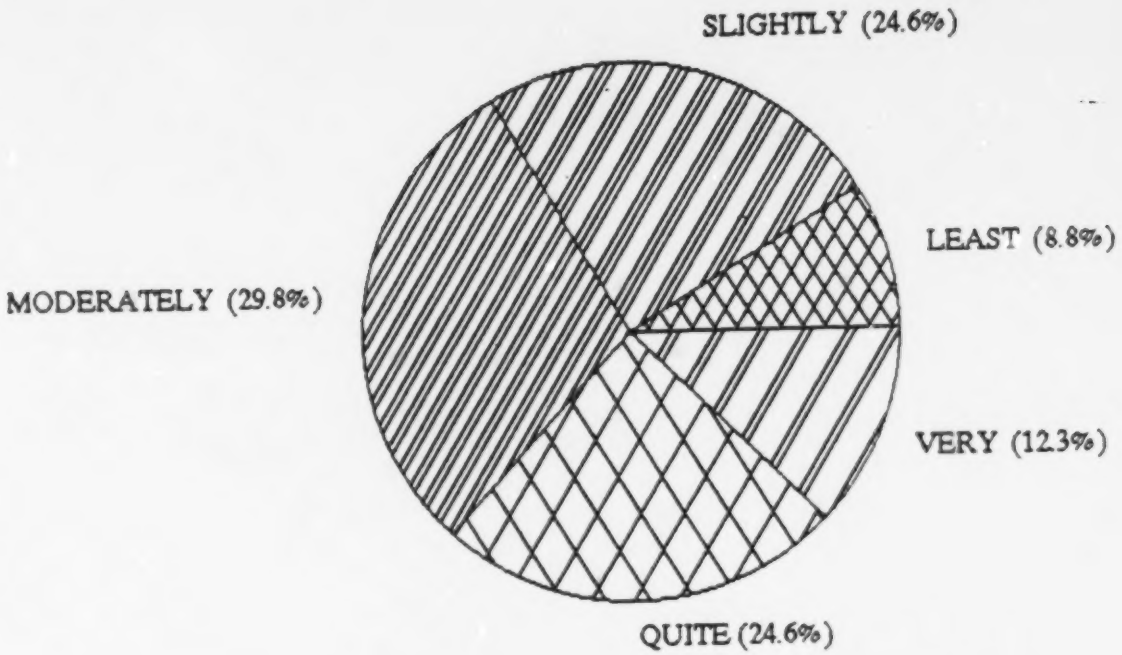

Figure 15 – Students with Weak Math & Language Skills
(excluding the suburban campus)

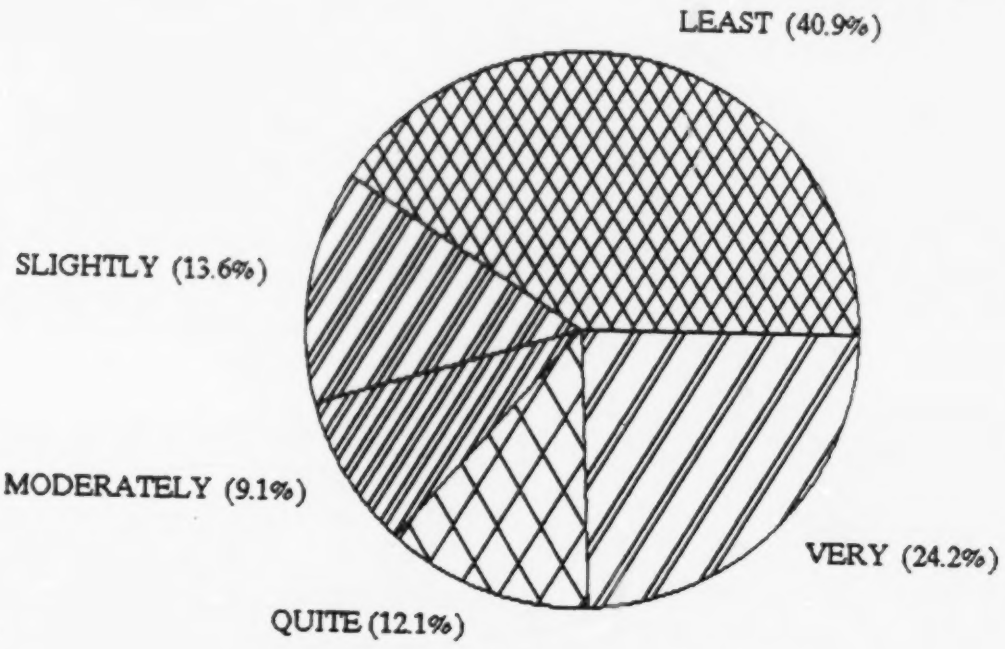

Figure 16 – Faculty Job Security

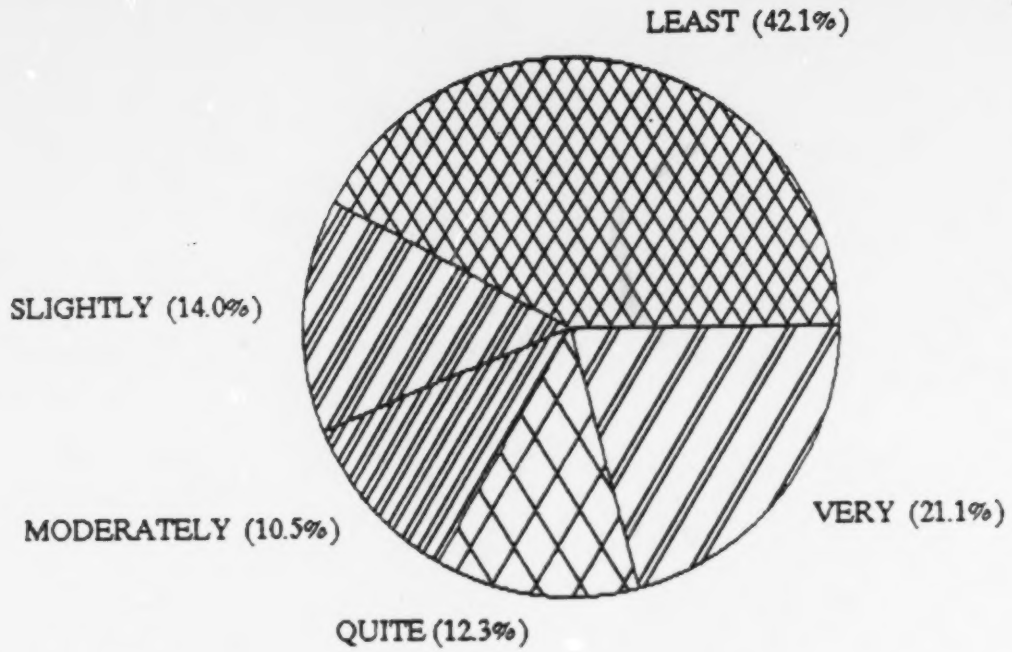

Figure 17 – Faculty Job Security
(excluding the suburban campus)

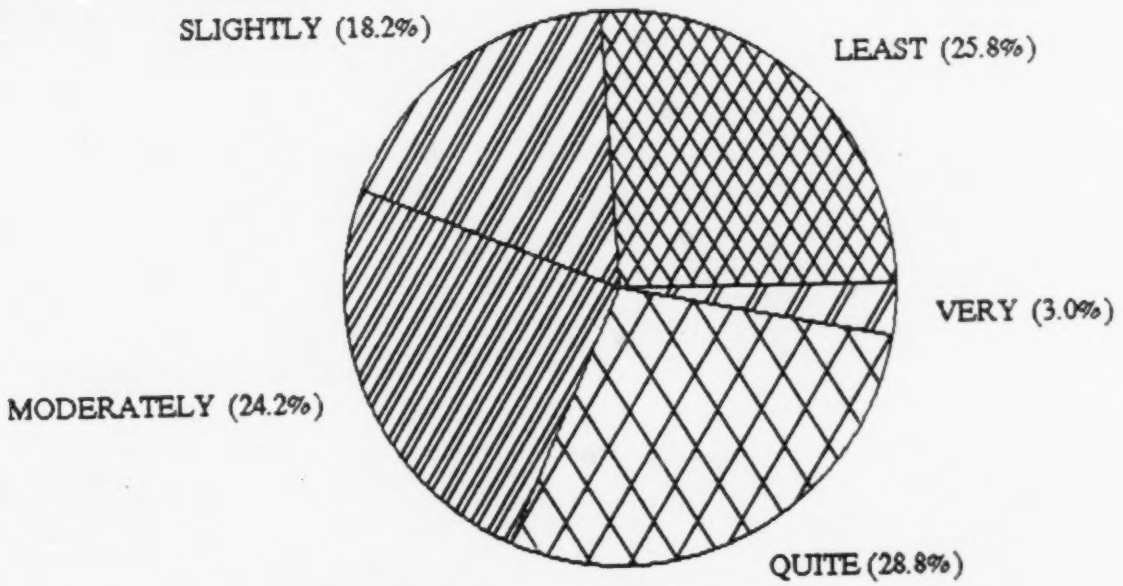

Figure 18 – Student Personal or Family Problems

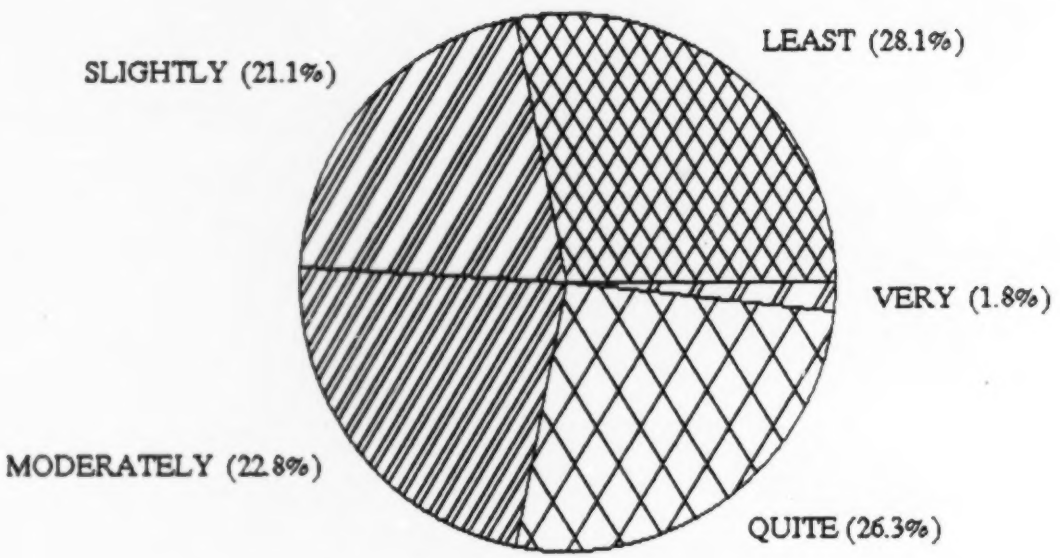

Figure 19 – Student Personal or Family Problems
(excluding the suburban campus)